

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 68/360 = 0.19$

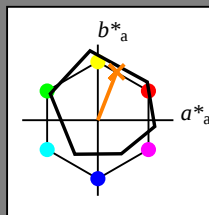
Data for any device (d) or elementary (e) colour:

$HIC^*_-$

hue text for the colours of this page:

$H^*_- = R50Y_-$

triangle lightness  $T^*$



| ORS18a; adapted (a) CIELAB data |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
| name                            | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R-,Ma                           | 47.9        | 65.3    | 50.5    | 82.6         | 37           |
| Y-,Ma                           | 90.3        | -10.2   | 91.7    | 92.3         | 96           |
| G-,Ma                           | 50.9        | -62.8   | 34.9    | 71.9         | 150          |
| C-,Ma                           | 58.6        | -30.3   | -45.0   | 54.2         | 236          |
| B-,Ma                           | 25.7        | 31.0    | -44.4   | 54.2         | 305          |
| M-,Ma                           | 48.1        | 75.2    | -8.3    | 75.7         | 353          |
| N-,Ma                           | 18.0        | 0.0     | 0.0     | 0.0          | 0            |
| W-,Ma                           | 95.4        | 0.0     | 0.0     | 0.0          | 0            |
| R-,CIE                          | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| Y-,CIE                          | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| G-,CIE                          | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| B-,CIE                          | 30.5        | 1.4     | -46.4   | 46.4         | 271          |

Data for maximum colour (Ma):

$LabCh^*_{-,Ma}$ : 68 25 63 68 68

$HIC^*_{-,Ma}$ : R50Y\_100\_100\_

$rgbic^*_{-,Ma}$ :

1.0 0.5 0.0 1.0 1.0

triangle lightness  $T^*$

% Gamut

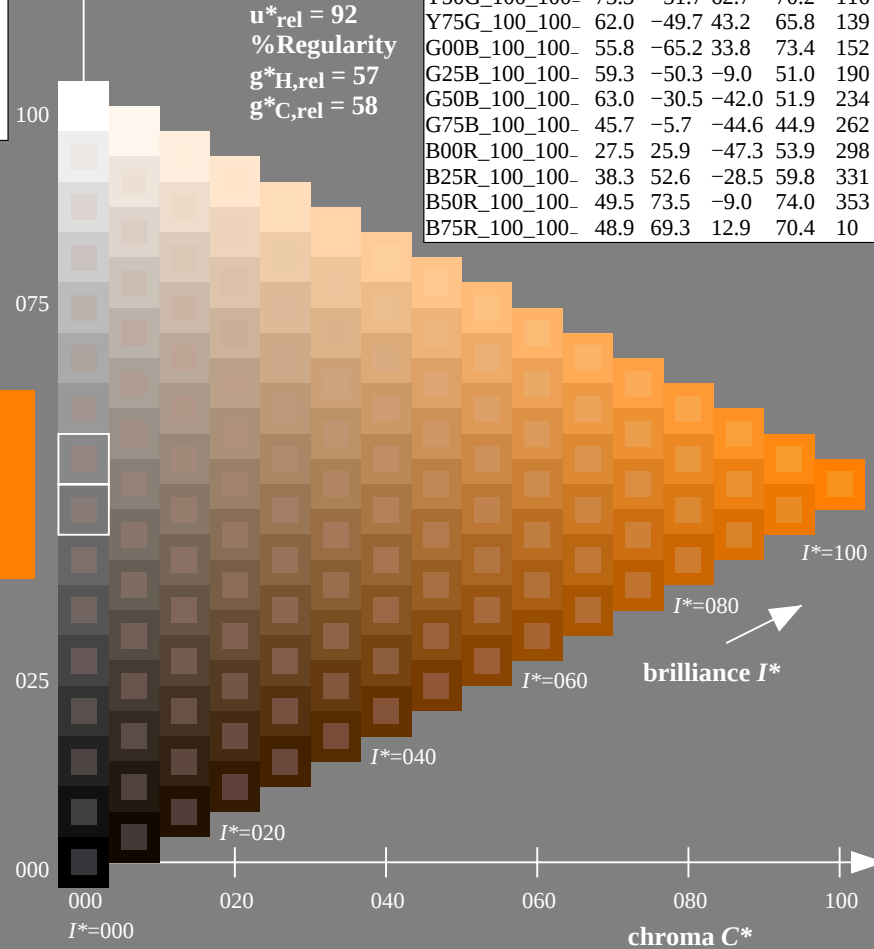
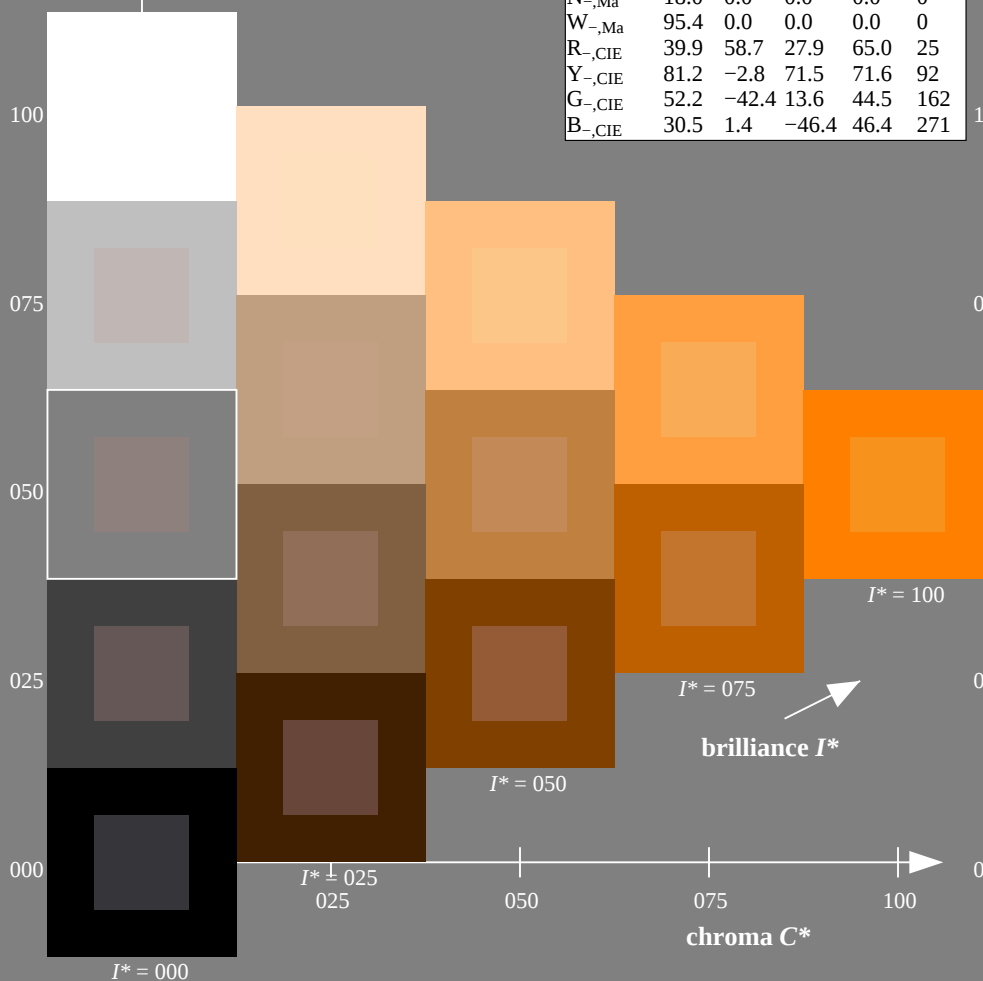
$u^*_{rel} = 92$

% Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

| ORS20a; adapted (a) CIELAB data |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
| $H^*_-$                         | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R00Y_100_100_                   | 48.4        | 66.1    | 40.2    | 77.3         | 31           |
| R25Y_100_100_                   | 56.8        | 48.0    | 50.5    | 69.6         | 46           |
| R50Y_100_100_                   | 68.6        | 25.0    | 63.9    | 68.6         | 68           |
| R75Y_100_100_                   | 80.6        | 4.8     | 77.2    | 77.3         | 86           |
| Y00G_100_100_                   | 90.2        | -9.6    | 88.2    | 88.7         | 96           |
| Y25G_100_100_                   | 83.2        | -18.4   | 79.9    | 81.9         | 102          |
| Y50G_100_100_                   | 73.3        | -31.7   | 62.7    | 70.2         | 116          |
| Y75G_100_100_                   | 62.0        | -49.7   | 43.2    | 65.8         | 139          |
| G00B_100_100_                   | 55.8        | -65.2   | 33.8    | 73.4         | 152          |
| G25B_100_100_                   | 59.3        | -50.3   | -9.0    | 51.0         | 190          |
| G50B_100_100_                   | 63.0        | -30.5   | -42.0   | 51.9         | 234          |
| G75B_100_100_                   | 45.7        | -5.7    | -44.6   | 44.9         | 262          |
| B00R_100_100_                   | 27.5        | 25.9    | -47.3   | 53.9         | 298          |
| B25R_100_100_                   | 38.3        | 52.6    | -28.5   | 59.8         | 331          |
| B50R_100_100_                   | 49.5        | 73.5    | -9.0    | 74.0         | 353          |
| B75R_100_100_                   | 48.9        | 69.3    | 12.9    | 70.4         | 10           |



TUB-test chart QE17; hue code:  $H^*_- = R50Y_-$   
Test chart according to DIN 33872, 3D=1, de=0,  $cm y0^*$

input:  $rgb/cmyk \rightarrow rgb/cmyk$   
output: no change

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 67/360 = 0.18$

$H^*_d = R50Y_d$

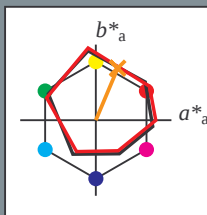
Data for any device (d) or elementary (e) colour:

$HIC^*_d$

hue text for the colours of this page:

$H^*_d = R50Y_d$

triangle lightness  $T^*$



| ORS20a; adapted (a) CIELAB data |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
| name                            | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>d</sub> ,Ma              | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| Y <sub>d</sub> ,Ma              | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| G <sub>d</sub> ,Ma              | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| C <sub>d</sub> ,Ma              | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| B <sub>d</sub> ,Ma              | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| M <sub>d</sub> ,Ma              | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| N <sub>d</sub> ,Ma              | 24.3        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>d</sub> ,Ma              | 95.6        | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>d</sub> ,CIE             | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| Y <sub>d</sub> ,CIE             | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| G <sub>d</sub> ,CIE             | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| B <sub>d</sub> ,CIE             | 30.5        | 1.4     | -46.4   | 46.4         | 271          |

Data for maximum colour (Ma):

$LabCh^*_d, Ma$ : 64 28 68 74 67

$HIC^*_d, Ma$ : R50Y\_100\_100d

$rgbic^*_d, Ma$ :

1.0 0.5 0.0 1.0 1.0

triangle lightness  $T^*$

% Gamut

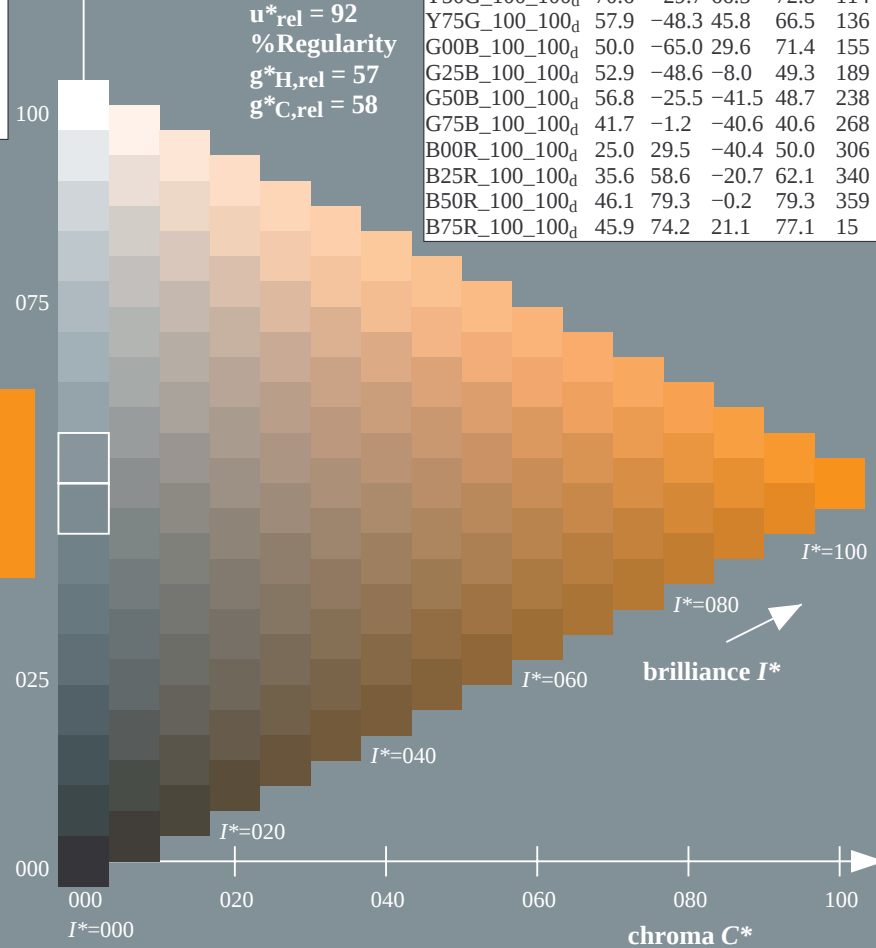
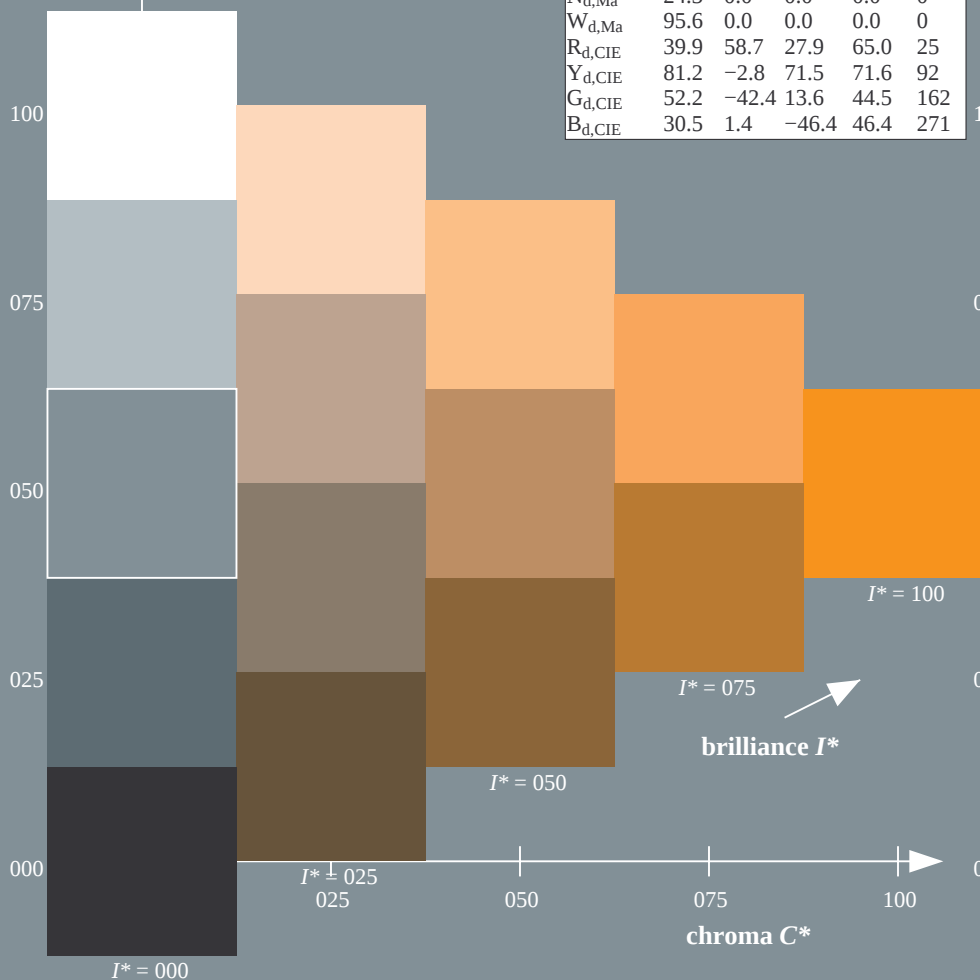
$u^*_{rel} = 92$

% Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

| ORS20a; adapted (a) CIELAB data |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
| $H^*_d$                         | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R00Y_100_100d                   | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| R25Y_100_100d                   | 53.0        | 53.4    | 54.8    | 76.5         | 45           |
| R50Y_100_100d                   | 64.9        | 28.9    | 68.6    | 74.5         | 67           |
| R75Y_100_100d                   | 78.6        | 4.3     | 84.7    | 84.8         | 87           |
| Y00G_100_100d                   | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| Y25G_100_100d                   | 81.2        | -17.0   | 84.3    | 86.0         | 101          |
| Y50G_100_100d                   | 70.6        | -29.7   | 66.5    | 72.8         | 114          |
| Y75G_100_100d                   | 57.9        | -48.3   | 45.8    | 66.5         | 136          |
| G00B_100_100d                   | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| G25B_100_100d                   | 52.9        | -48.6   | -8.0    | 49.3         | 189          |
| G50B_100_100d                   | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| G75B_100_100d                   | 41.7        | -1.2    | -40.6   | 40.6         | 268          |
| B00R_100_100d                   | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| B25R_100_100d                   | 35.6        | 58.6    | -20.7   | 62.1         | 340          |
| B50R_100_100d                   | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| B75R_100_100d                   | 45.9        | 74.2    | 21.1    | 77.1         | 15           |



TUB-test chart QE17; hue code:  $H^*_d=R50Y_d$   
Test chart according to DIN 33872, 3D=1, de=0,  $cmY0^*$

input:  $rgb/cmyk \rightarrow rgb_{dd}$   
output: 3D-linearization to  $cmY0^*_{dd}$

TUB registration: 20130201-QE17/QE17L0FA.TXT /PS  
application for measurement of offset print output, separation  $cmY0^*$  (CMY0)

TUB material: code=rha4ta

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 67/360 = 0.18$

$H^*_d = R50Y_d$

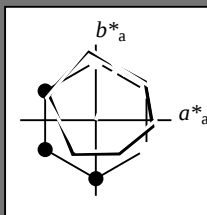
Data for any device (d) or elementary (e) colour:

$HIC^*_d$

hue text for the colours of this page:

$H^*_d = R50Y_d$

triangle lightness  $T^*$



| ORS20a; adapted (a) CIELAB data |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
| name                            | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| $R_{d,Ma}$                      | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| $Y_{d,Ma}$                      | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| $G_{d,Ma}$                      | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| $C_{d,Ma}$                      | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| $B_{d,Ma}$                      | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| $M_{d,Ma}$                      | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| $N_{d,Ma}$                      | 24.3        | 0.0     | 0.0     | 0.0          | 0            |
| $W_{d,Ma}$                      | 95.6        | 0.0     | 0.0     | 0.0          | 0            |
| $R_{d,CIE}$                     | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| $Y_{d,CIE}$                     | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| $G_{d,CIE}$                     | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| $B_{d,CIE}$                     | 30.5        | 1.4     | -46.4   | 46.4         | 271          |

Data for maximum colour (Ma):

$LabCh^*_{d,Ma}$ : 64 28 68 74 67

$HIC^*_{d,Ma}$ : R50Y\_100\_100d

$rgbic^*_{d,Ma}$ :

1.0 0.5 0.0 1.0 1.0

triangle lightness  $T^*$

% Gamut

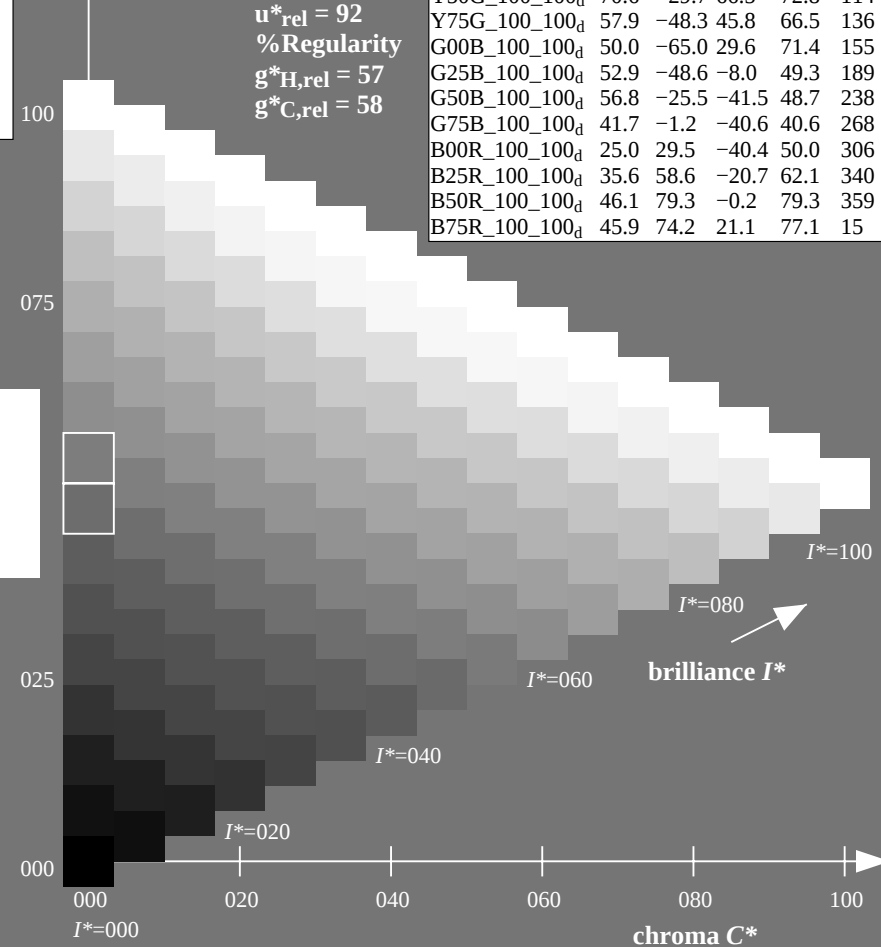
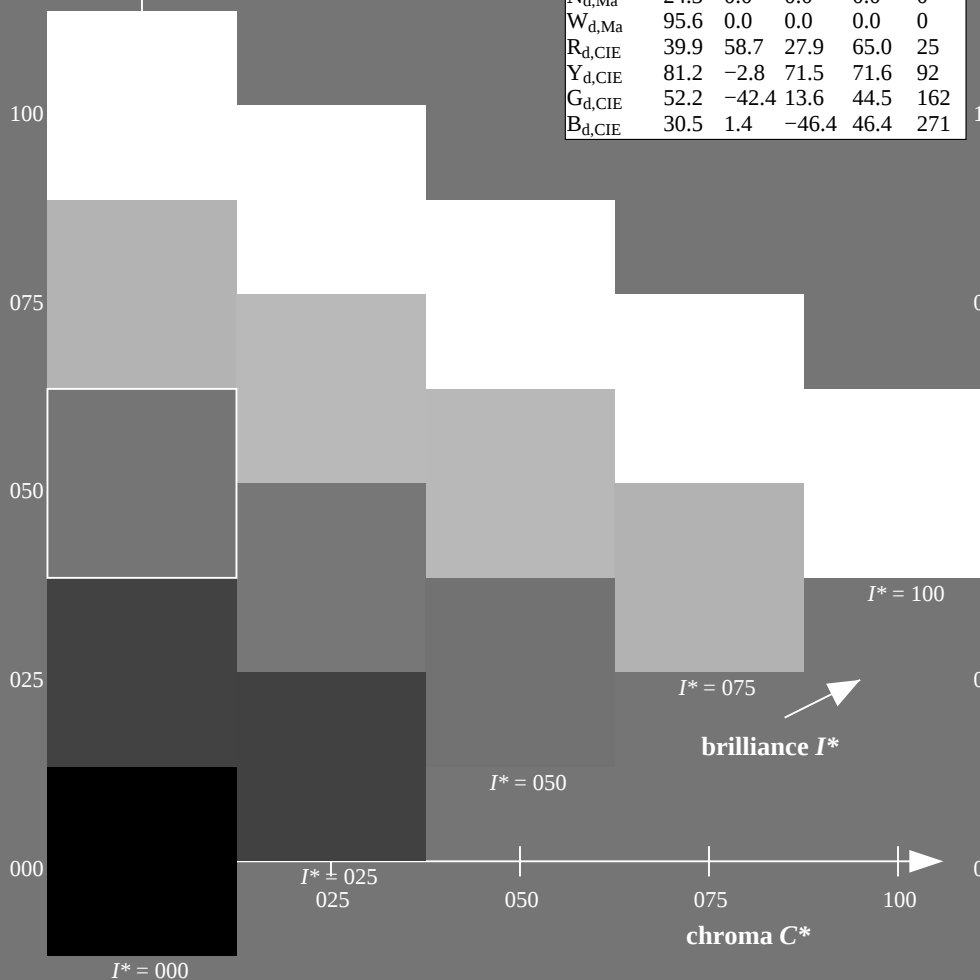
$u^*_{rel} = 92$

% Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

| ORS20a; adapted (a) CIELAB data |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
| $H^*_d$                         | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| $R00Y_{100_100d}$               | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| $R25Y_{100_100d}$               | 53.0        | 53.4    | 54.8    | 76.5         | 45           |
| $R50Y_{100_100d}$               | 64.9        | 28.9    | 68.6    | 74.5         | 67           |
| $R75Y_{100_100d}$               | 78.6        | 4.3     | 84.7    | 84.8         | 87           |
| $Y00G_{100_100d}$               | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| $Y25G_{100_100d}$               | 81.2        | -17.0   | 84.3    | 86.0         | 101          |
| $Y50G_{100_100d}$               | 70.6        | -29.7   | 66.5    | 72.8         | 114          |
| $Y75G_{100_100d}$               | 57.9        | -48.3   | 45.8    | 66.5         | 136          |
| $G00B_{100_100d}$               | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| $G25B_{100_100d}$               | 52.9        | -48.6   | -8.0    | 49.3         | 189          |
| $G50B_{100_100d}$               | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| $G75B_{100_100d}$               | 41.7        | -1.2    | -40.6   | 40.6         | 268          |
| $B00R_{100_100d}$               | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| $B25R_{100_100d}$               | 35.6        | 58.6    | -20.7   | 62.1         | 340          |
| $B50R_{100_100d}$               | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| $B75R_{100_100d}$               | 45.9        | 74.2    | 21.1    | 77.1         | 15           |



TUB-test chart QE17; hue code:  $H^*_d=R50Y_d$   
Test chart according to DIN 33872, 3D=1, de=0,  $cmY0^*$

input:  $rgb/cmyk \rightarrow rgb_{dd}$   
output: 3D-linearization to  $cmY0^*_{dd}$

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 67/360 = 0.18$

$H^*_d = R50Y_d$

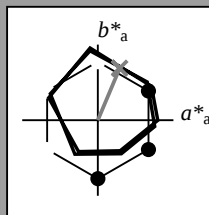
Data for any device (d) or elementary (e) colour:

$HIC^*_d$

hue text for the colours of this page:

$H^*_d = R50Y_d$

triangle lightness  $T^*$



ORS20a; adapted (a) CIELAB data

| name        | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|-------------|-------------|---------|---------|--------------|--------------|
| $R_{d,Ma}$  | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| $Y_{d,Ma}$  | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| $G_{d,Ma}$  | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| $C_{d,Ma}$  | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| $B_{d,Ma}$  | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| $M_{d,Ma}$  | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| $N_{d,Ma}$  | 24.3        | 0.0     | 0.0     | 0.0          | 0            |
| $W_{d,Ma}$  | 95.6        | 0.0     | 0.0     | 0.0          | 0            |
| $R_{d,CIE}$ | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| $Y_{d,CIE}$ | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| $G_{d,CIE}$ | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| $B_{d,CIE}$ | 30.5        | 1.4     | -46.4   | 46.4         | 271          |

Data for maximum colour (Ma):

$LabCh^*_{d,Ma}$ : 64 28 68 74 67

$HIC^*_{d,Ma}$ : R50Y\_100\_100d

$rgbic^*_{d,Ma}$ :

1.0 0.5 0.0 1.0 1.0

triangle lightness  $T^*$

% Gamut

$u^*_{rel} = 92$

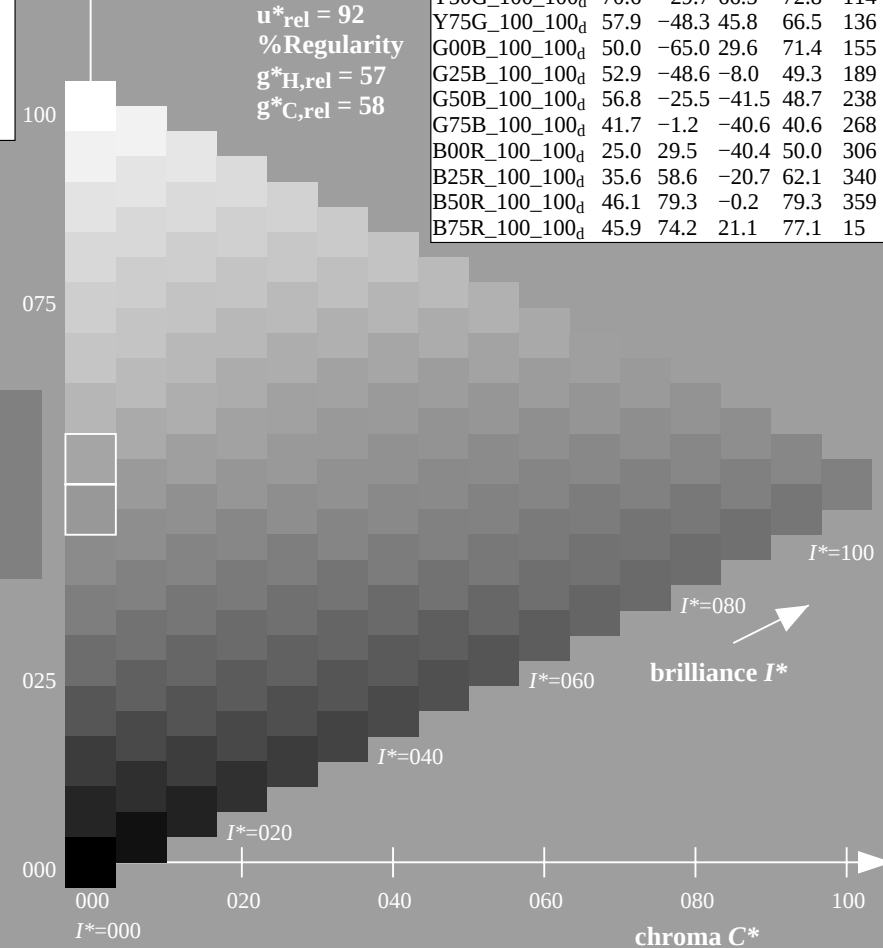
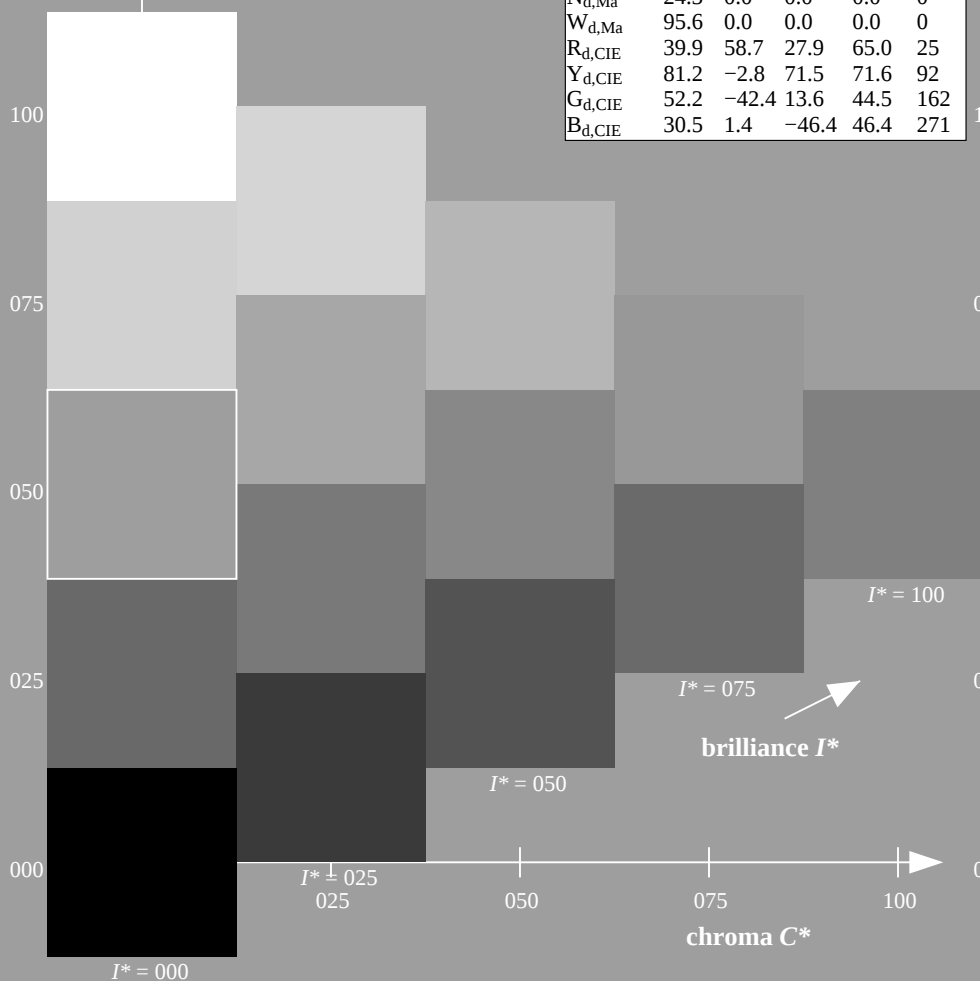
% Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

ORS20a; adapted (a) CIELAB data

| $H^*_d$            | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
|--------------------|-------------|---------|---------|--------------|--------------|
| $R00Y\_100\_100_d$ | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| $R25Y\_100\_100_d$ | 53.0        | 53.4    | 54.8    | 76.5         | 45           |
| $R50Y\_100\_100_d$ | 64.9        | 28.9    | 68.6    | 74.5         | 67           |
| $R75Y\_100\_100_d$ | 78.6        | 4.3     | 84.7    | 84.8         | 87           |
| $Y00G\_100\_100_d$ | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| $Y25G\_100\_100_d$ | 81.2        | -17.0   | 84.3    | 86.0         | 101          |
| $Y50G\_100\_100_d$ | 70.6        | -29.7   | 66.5    | 72.8         | 114          |
| $Y75G\_100\_100_d$ | 57.9        | -48.3   | 45.8    | 66.5         | 136          |
| $G00B\_100\_100_d$ | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| $G25B\_100\_100_d$ | 52.9        | -48.6   | -8.0    | 49.3         | 189          |
| $G50B\_100\_100_d$ | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| $G75B\_100\_100_d$ | 41.7        | -1.2    | -40.6   | 40.6         | 268          |
| $B00R\_100\_100_d$ | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| $B25R\_100\_100_d$ | 35.6        | 58.6    | -20.7   | 62.1         | 340          |
| $B50R\_100\_100_d$ | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| $B75R\_100\_100_d$ | 45.9        | 74.2    | 21.1    | 77.1         | 15           |



TUB-test chart QE17; hue code:  $H^*_d=R50Y_d$   
Test chart according to DIN 33872, 3D=1, de=0,  $cmy0^*$

input:  $rgb/cmyk \rightarrow rgb_{dd}$   
output: 3D-linearization to  $cmy0^*_{dd}$

Input and Output: Offset Reflective System ORS18a for relative CIELAB hue  $h_{ab,a,rel} = h_{ab}/360 = 67/360 = 0.18$

$H^*_d = R50Y_d$

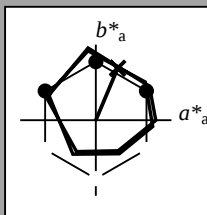
Data for any device (d) or elementary (e) colour:

$HIC^*_d$

hue text for the colours of this page:

$H^*_d = R50Y_d$

triangle lightness  $T^*$



| ORS20a; adapted (a) CIELAB data |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
| name                            | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R <sub>d</sub> ,Ma              | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| Y <sub>d</sub> ,Ma              | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| G <sub>d</sub> ,Ma              | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| C <sub>d</sub> ,Ma              | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| B <sub>d</sub> ,Ma              | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| M <sub>d</sub> ,Ma              | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| N <sub>d</sub> ,Ma              | 24.3        | 0.0     | 0.0     | 0.0          | 0            |
| W <sub>d</sub> ,Ma              | 95.6        | 0.0     | 0.0     | 0.0          | 0            |
| R <sub>d</sub> ,CIE             | 39.9        | 58.7    | 27.9    | 65.0         | 25           |
| Y <sub>d</sub> ,CIE             | 81.2        | -2.8    | 71.5    | 71.6         | 92           |
| G <sub>d</sub> ,CIE             | 52.2        | -42.4   | 13.6    | 44.5         | 162          |
| B <sub>d</sub> ,CIE             | 30.5        | 1.4     | -46.4   | 46.4         | 271          |

Data for maximum colour (Ma):

$LabCh^*_d, Ma$ : 64 28 68 74 67

$HIC^*_d, Ma$ : R50Y\_100\_100d

$rgbic^*_d, Ma$ :

1.0 0.5 0.0 1.0 1.0

triangle lightness  $T^*$

% Gamut

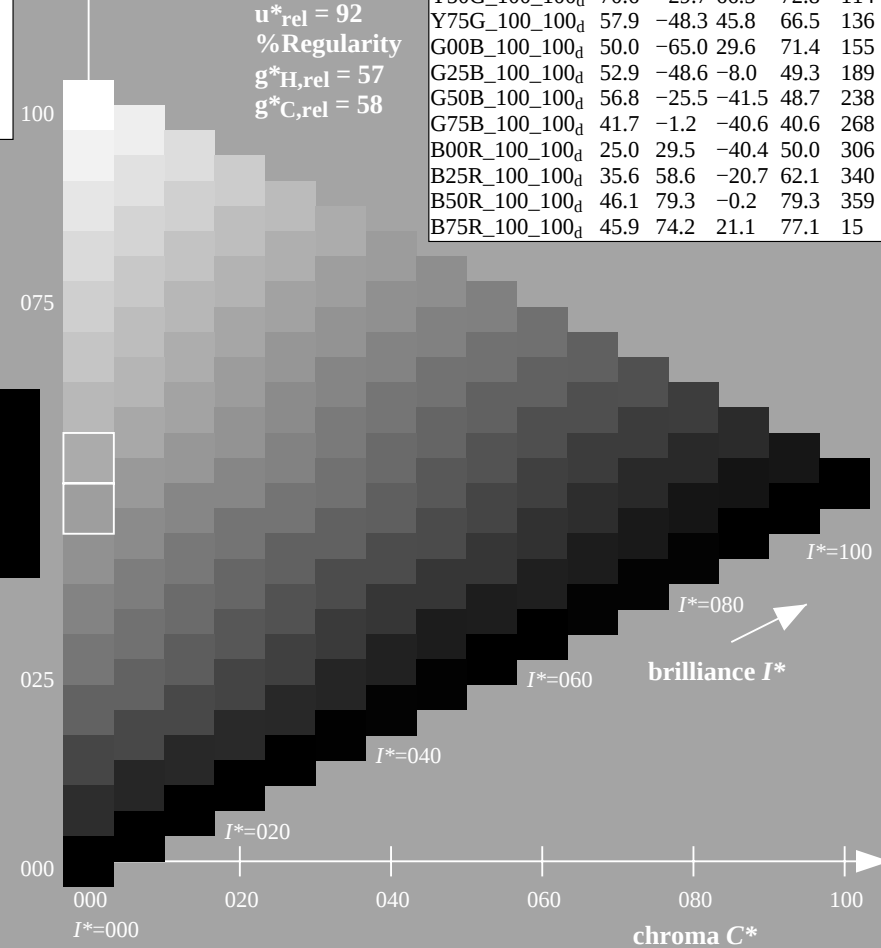
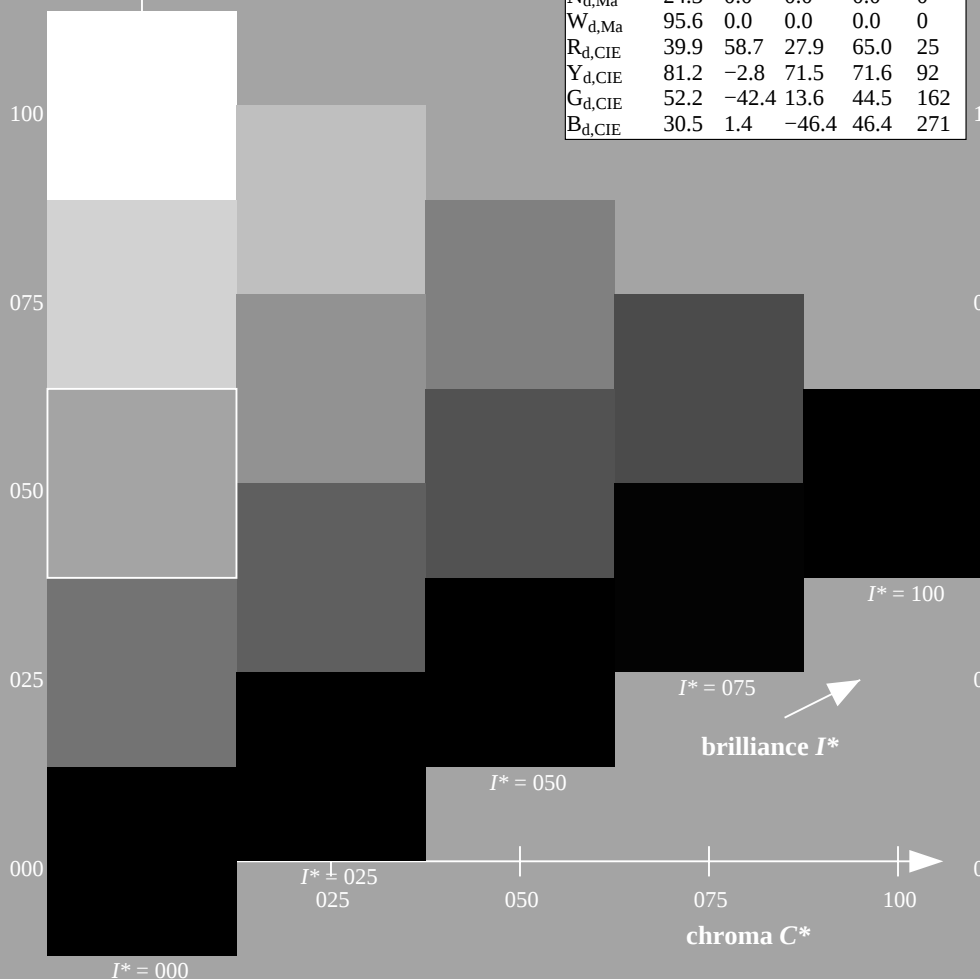
$u^*_{rel} = 92$

% Regularity

$g^*_{H,rel} = 57$

$g^*_{C,rel} = 58$

| ORS20a; adapted (a) CIELAB data |             |         |         |              |              |
|---------------------------------|-------------|---------|---------|--------------|--------------|
| $H^*_d$                         | $L^*=L^*_a$ | $a^*_a$ | $b^*_a$ | $C^*_{ab,a}$ | $h^*_{ab,a}$ |
| R00Y_100_100d                   | 45.4        | 70.9    | 44.8    | 83.9         | 32           |
| R25Y_100_100d                   | 53.0        | 53.4    | 54.8    | 76.5         | 45           |
| R50Y_100_100d                   | 64.9        | 28.9    | 68.6    | 74.5         | 67           |
| R75Y_100_100d                   | 78.6        | 4.3     | 84.7    | 84.8         | 87           |
| Y00G_100_100d                   | 87.8        | -10.2   | 95.4    | 96.0         | 96           |
| Y25G_100_100d                   | 81.2        | -17.0   | 84.3    | 86.0         | 101          |
| Y50G_100_100d                   | 70.6        | -29.7   | 66.5    | 72.8         | 114          |
| Y75G_100_100d                   | 57.9        | -48.3   | 45.8    | 66.5         | 136          |
| G00B_100_100d                   | 50.0        | -65.0   | 29.6    | 71.4         | 155          |
| G25B_100_100d                   | 52.9        | -48.6   | -8.0    | 49.3         | 189          |
| G50B_100_100d                   | 56.8        | -25.5   | -41.5   | 48.7         | 238          |
| G75B_100_100d                   | 41.7        | -1.2    | -40.6   | 40.6         | 268          |
| B00R_100_100d                   | 25.0        | 29.5    | -40.4   | 50.0         | 306          |
| B25R_100_100d                   | 35.6        | 58.6    | -20.7   | 62.1         | 340          |
| B50R_100_100d                   | 46.1        | 79.3    | -0.2    | 79.3         | 359          |
| B75R_100_100d                   | 45.9        | 74.2    | 21.1    | 77.1         | 15           |



TUB-test chart QE17; hue code:  $H^*_d = R50Y_d$   
Test chart according to DIN 33872, 3D=1, de=0,  $cmY0^*$

input:  $rgb/cmyk \rightarrow rgb_{dd}$   
output: 3D-linearization to  $cmY0^*_{dd}$



Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ; Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

$J=Y_d$  Yellow

$LCH^*_d = 87.8 \ 96.0 \ 96.1$   
 $LAB^*_d = 87.8 \ -10.2 \ 95.4$   
 $rgb^*_d = 1.0 \ 1.0 \ 0.0$

$L=G_d$  leaf-green

$LCH^*_d = 50.0 \ 71.4 \ 155.5$   
 $LAB^*_d = 50.0 \ -65.0 \ 29.6$   
 $rgb^*_d = 0.0 \ 1.0 \ 0.0$

$C=C_d$  cyan-blue

$LCH^*_d = 56.8 \ 48.7 \ 238.4$   
 $LAB^*_d = 56.8 \ -25.5 \ -41.5$   
 $rgb^*_d = 0.0 \ 1.0 \ 1.0$

$O=R_d$  orange-red

$LCH^*_d = 45.4 \ 83.9 \ 32.3$   
 $LAB^*_d = 45.4 \ 70.9 \ 44.8$   
 $rgb^*_d = 1.0 \ 0.0 \ 0.0$

$M=M_d$  magenta-red

$LCH^*_d = 46.1 \ 79.3 \ 359.8$   
 $LAB^*_d = 46.1 \ 79.3 \ -0.2$   
 $rgb^*_d = 1.0 \ 0.0 \ 1.0$

$V=B_d$  violet-blue

$LCH^*_d = 25.0 \ 50.0 \ 306.2$   
 $LAB^*_d = 25.0 \ 29.5 \ -40.4$   
 $rgb^*_d = 0.0 \ 0.0 \ 1.0$

$Y_e$  yellow

$LCH^*_e = 83.6 \ 90.4 \ 92.3$   
 $LAB^*_e = 83.6 \ -3.6 \ 90.4$   
 $rgb^*_{de} = 1.0 \ 0.878 \ 0.0$

$G_e$  green

$LCH^*_e = 50.6 \ 65.2 \ 162.2$   
 $LAB^*_e = 50.6 \ -62.1 \ 19.9$   
 $rgb^*_{de} = 0.0 \ 1.0 \ 0.151$

$C_e$  blue-green

$LCH^*_e = 55.0 \ 45.3 \ 216.9$   
 $LAB^*_e = 55.0 \ -36.2 \ -27.2$   
 $rgb^*_{de} = 0.0 \ 1.0 \ 0.747$

$B_e$  blue

$LCH^*_e = 40.2 \ 40.6 \ 271.7$   
 $LAB^*_e = 40.2 \ 1.2 \ -40.6$   
 $rgb^*_{de} = 0.0 \ 0.458 \ 1.0$

$R_e$  red

$LCH^*_e = 45.6 \ 80.0 \ 25.4$   
 $LAB^*_e = 45.6 \ 72.2 \ 34.4$   
 $rgb^*_{de} = 1.0 \ 0.0 \ 0.254$

$M_e$  blue-red

$LCH^*_e = 31.1 \ 55.9 \ 328.6$   
 $LAB^*_e = 31.1 \ 47.7 \ -29.1$   
 $rgb^*_{de} = 0.321 \ 0.0 \ 1.0$

$Y_s$  yellow

$LCH^*_s = 81.4 \ 87.9 \ 90.0$   
 $LAB^*_s = 81.4 \ 0.0 \ 87.9$   
 $rgb^*_{ds} = 1.0 \ 0.828 \ 0.0$

$G_s$  green

$LCH^*_s = 52.3 \ 68.9 \ 150.0$   
 $LAB^*_s = 52.3 \ -59.6 \ 34.4$   
 $rgb^*_{ds} = 0.062 \ 1.0 \ 0.0$

$R_s$  red

$LCH^*_s = 45.5 \ 82.4 \ 30.0$   
 $LAB^*_s = 45.5 \ 71.3 \ 41.2$   
 $rgb^*_{ds} = 1.0 \ 0.0 \ 0.096$

$C_s$  blue-green

$LCH^*_s = 54.5 \ 45.7 \ 210.0$   
 $LAB^*_s = 54.5 \ -39.6 \ -22.8$   
 $rgb^*_{ds} = 0.0 \ 1.0 \ 0.685$

$M_s$  blue-red

$LCH^*_s = 31.6 \ 56.5 \ 330.0$   
 $LAB^*_s = 31.6 \ 49.0 \ -28.2$   
 $rgb^*_{ds} = 0.337 \ 0.0 \ 1.0$

$B_s$  blue

$LCH^*_s = 40.9 \ 40.6 \ 270.0$   
 $LAB^*_s = 40.9 \ 0.0 \ -40.6$   
 $rgb^*_{ds} = 0.0 \ 0.479 \ 1.0$

Notes to the CIELAB chroma diagrams ( $a^*_d, b^*_d$ ), ( $a^*_s, b^*_s$ ), ( $a^*_e, b^*_e$ )

1. For the  $rgb^*_e$ -input values the CIELAB data  $LCH^*_e$  and  $LAB^*_e$  have been calculated.

2. For the calculation of the standard hue angle  $h_{ab,s}$  use for any device values  $rgb^*_e$  the equation:

$$h_{ab,s} = \text{atan} [ r^*_d \cos(30) + g^*_d \cos(150) ] / [ r^*_d \sin(30) + g^*_d \sin(150) + b^*_d \sin(270) ] \quad (1)$$

3. For the 48 or 360 equally spaced standard hue angles  $h_{ab,s}$  of the colours of maximum chroma use the seven hue angles of the 60 degree colours  $s$ :  $h_{ab,si} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0, 390.0$  ( $i=0,6$ ) and the equations for a 48 and 360 step hue circle:

$$h_{48ab,sij} = h_{ab,si} + j [h_{ab,si+1} - h_{ab,si}] / 8 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (2)$$

$$h_{360ab,sij} = h_{ab,si} + j [h_{ab,si+1} - h_{ab,si}] / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (3)$$

4. For the 48 or 360 elementary hue angles  $h_{ab,e}$  of the colours of maximum chroma use the seven hue angles of the elementary colours  $e$ :  $h_{ab,ei} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6, 385.5$  ( $i=0,6$ ) and the equations for a 48 and 360 step elementary hue circle:

$$h_{48ab,eij} = h_{ab,ei} + j [h_{ab,ei+1} - h_{ab,ei}] / 8 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 7) \quad (4)$$

$$h_{360ab,eij} = h_{ab,ei} + j [h_{ab,ei+1} - h_{ab,ei}] / 60 \quad (i = 0, 1, \dots, 5; j = 0, 1, \dots, 59) \quad (5)$$

5. For any elementary hue angle  $h_{ab,e}$  there is a well defined device hue angle  $h_{ab,d}$  see the following tables, columns 1 to 5 or 1 to 4.

6. The values  $rgb^*_e$  produce the output of the device-independent elementary hues

1-103631-L0 QE170-72 LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

TUB-test chart QE17; hue code:  $H^*_d=R50Y_d$   
48 step hue circles;  $rgb-LabCh^*$ -tables

input:  $rgb/cmyk \rightarrow rgb_{dd}$   
output: 3D-linearization to  $cmy0^*_{dd}$

Output: Offset standard print; separation cmy0\*, D65, page 7/33

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| $h_{ab,d}$ | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd64M}$ |       |       | $LAB^*_{dd64M}$ (x=LabCh) |       |       |      |       | $rgb^*_{ddx361M}$ |       |       | $LAB^*_{ddx361M}$ (x=LabCh) |       |       |      |     | $rgb^*_{dsx361M}$ |       |       | $LAB^*_{dsx361M}$ (x=LabCh) |       |       |      |     | $rgb^*_{dex361M}$ |       |       | $LAB^*_{dex361M}$ |       |       |      |     |
|------------|------------|------------|-----------------|-------|-------|---------------------------|-------|-------|------|-------|-------------------|-------|-------|-----------------------------|-------|-------|------|-----|-------------------|-------|-------|-----------------------------|-------|-------|------|-----|-------------------|-------|-------|-------------------|-------|-------|------|-----|
| 32.3       | 30.0       | 25.4       | 1.0             | 0.0   | 0.0   | 45.4                      | 70.9  | 44.8  | 83.9 | 32.3  | 1.0               | 0.0   | 0.0   | 45.5                        | 70.9  | 44.9  | 83.9 | 32  | 1.0               | 0.0   | 0.096 | 45.5                        | 71.4  | 41.2  | 82.4 | 30  | 1.0               | 0.0   | 0.255 | 45.7              | 72.2  | 34.4  | 80.0 | 25  |
| 38.1       | 37.5       | 33.8       | 1.0             | 0.125 | 0.0   | 48.9                      | 62.8  | 49.4  | 79.9 | 38.1  | 1.0               | 0.117 | 0.0   | 48.7                        | 63.4  | 49.1  | 80.2 | 37  | 1.0               | 0.1   | 0.0   | 48.2                        | 64.5  | 48.6  | 80.7 | 37  | 1.0               | 0.021 | 0.0   | 46.0              | 69.6  | 45.7  | 83.3 | 33  |
| 46.8       | 45.0       | 42.1       | 1.0             | 0.25  | 0.0   | 53.6                      | 51.9  | 55.5  | 76.0 | 46.8  | 1.0               | 0.25  | 0.0   | 53.7                        | 52.0  | 55.5  | 76.0 | 46  | 1.0               | 0.223 | 0.0   | 52.7                        | 54.4  | 54.4  | 76.9 | 45  | 1.0               | 0.183 | 0.0   | 51.1              | 57.9  | 52.5  | 78.1 | 42  |
| 56.9       | 52.5       | 50.5       | 1.0             | 0.375 | 0.0   | 59.1                      | 40.3  | 62.0  | 74.0 | 56.9  | 1.0               | 0.367 | 0.0   | 58.8                        | 41.1  | 61.7  | 74.2 | 56  | 1.0               | 0.313 | 0.0   | 56.5                        | 46.2  | 59.1  | 75.0 | 52  | 1.0               | 0.288 | 0.0   | 55.4              | 48.5  | 57.8  | 75.4 | 49  |
| 67.1       | 60.0       | 58.8       | 1.0             | 0.5   | 0.0   | 64.9                      | 28.9  | 68.6  | 74.5 | 67.1  | 1.0               | 0.5   | 0.0   | 64.9                        | 28.9  | 68.7  | 74.5 | 67  | 1.0               | 0.412 | 0.0   | 60.9                        | 37.1  | 64.2  | 74.2 | 60  | 1.0               | 0.398 | 0.0   | 60.3              | 38.3  | 63.5  | 74.1 | 58  |
| 78.6       | 67.5       | 67.2       | 1.0             | 0.625 | 0.0   | 72.1                      | 15.4  | 77.1  | 78.6 | 78.6  | 1.0               | 0.617 | 0.0   | 71.6                        | 16.5  | 76.7  | 78.4 | 77  | 1.0               | 0.498 | 0.0   | 64.8                        | 29.1  | 68.6  | 74.5 | 67  | 1.0               | 0.494 | 0.0   | 64.6              | 29.5  | 68.4  | 74.5 | 66  |
| 86.2       | 75.0       | 75.6       | 1.0             | 0.75  | 0.0   | 77.9                      | 5.4   | 83.8  | 84.0 | 86.2  | 1.0               | 0.75  | 0.0   | 77.9                        | 5.5   | 83.9  | 84.1 | 86  | 1.0               | 0.585 | 0.0   | 69.8                        | 20.0  | 74.7  | 77.4 | 75  | 1.0               | 0.592 | 0.0   | 70.2              | 19.3  | 75.2  | 77.6 | 75  |
| 92.1       | 82.5       | 83.9       | 1.0             | 0.875 | 0.0   | 83.4                      | -3.4  | 90.2  | 90.2 | 92.1  | 1.0               | 0.867 | 0.0   | 83.1                        | -2.7  | 89.8  | 89.9 | 91  | 1.0               | 0.68  | 0.0   | 74.7                        | 11.3  | 80.3  | 81.1 | 82  | 1.0               | 0.703 | 0.0   | 75.8              | 9.4   | 81.5  | 82.0 | 83  |
| 96.1       | 90.0       | 92.3       | 1.0             | 1.0   | 0.0   | 87.8                      | -10.2 | 95.4  | 96.0 | 96.1  | 1.0               | 1.0   | 0.0   | 87.8                        | -10.1 | 95.5  | 96.0 | 96  | 1.0               | 0.829 | 0.0   | 81.4                        | 0.0   | 88.0  | 88.0 | 90  | 1.0               | 0.879 | 0.0   | 83.6              | -3.6  | 90.4  | 90.5 | 92  |
| 98.8       | 97.5       | 101.0      | 0.875           | 1.0   | 0.0   | 84.3                      | -13.9 | 89.2  | 90.3 | 98.8  | 0.883             | 1.0   | 0.0   | 84.6                        | -13.6 | 89.7  | 90.7 | 98  | 0.959             | 1.0   | 0.0   | 86.7                        | -11.4 | 93.5  | 94.2 | 97  | 0.807             | 1.0   | 0.0   | 82.4              | -15.8 | 86.2  | 87.7 | 100 |
| 101.8      | 105.0      | 109.7      | 0.75            | 1.0   | 0.0   | 80.7                      | -17.5 | 83.5  | 85.3 | 101.8 | 0.75              | 1.0   | 0.0   | 80.8                        | -17.4 | 83.6  | 85.4 | 101 | 0.682             | 1.0   | 0.0   | 77.8                        | -21.2 | 79.4  | 82.2 | 105 | 0.583             | 1.0   | 0.0   | 73.7              | -26.1 | 72.7  | 77.3 | 109 |
| 107.6      | 112.5      | 118.5      | 0.625           | 1.0   | 0.0   | 75.3                      | -24.0 | 75.7  | 79.4 | 107.6 | 0.633             | 1.0   | 0.0   | 75.7                        | -23.6 | 76.3  | 79.9 | 107 | 0.54              | 1.0   | 0.0   | 72.1                        | -28.0 | 69.5  | 75.0 | 112 | 0.434             | 1.0   | 0.0   | 68.0              | -32.9 | 62.2  | 70.5 | 117 |
| 114.0      | 120.0      | 127.2      | 0.5             | 1.0   | 0.0   | 70.6                      | -29.7 | 66.5  | 72.8 | 114.0 | 0.5               | 1.0   | 0.0   | 70.6                        | -29.6 | 66.5  | 72.8 | 114 | 0.399             | 1.0   | 0.0   | 66.7                        | -34.5 | 59.9  | 69.2 | 120 | 0.322             | 1.0   | 0.0   | 62.6              | -40.8 | 53.8  | 67.6 | 127 |
| 121.4      | 127.5      | 136.0      | 0.375           | 1.0   | 0.0   | 65.7                      | -35.6 | 58.3  | 68.3 | 121.4 | 0.383             | 1.0   | 0.0   | 66.1                        | -35.2 | 58.9  | 68.6 | 120 | 0.325             | 1.0   | 0.0   | 62.8                        | -40.6 | 54.0  | 67.6 | 127 | 0.249             | 1.0   | 0.0   | 58.4              | -47.4 | 46.8  | 66.6 | 135 |
| 135.3      | 135.0      | 144.7      | 0.25            | 1.0   | 0.0   | 58.4                      | -47.3 | 46.8  | 66.6 | 135.3 | 0.25              | 1.0   | 0.0   | 58.4                        | -47.3 | 46.9  | 66.6 | 135 | 0.253             | 1.0   | 0.0   | 58.6                        | -47.0 | 47.1  | 66.7 | 135 | 0.122             | 1.0   | 0.0   | 54.6              | -54.2 | 38.4  | 66.5 | 144 |
| 144.4      | 142.5      | 153.4      | 0.125           | 1.0   | 0.0   | 54.7                      | -53.9 | 38.5  | 66.3 | 144.4 | 0.133             | 1.0   | 0.0   | 55.0                        | -53.5 | 39.2  | 66.4 | 143 | 0.159             | 1.0   | 0.0   | 55.7                        | -52.3 | 40.9  | 66.4 | 142 | 0.03              | 1.0   | 0.0   | 51.2              | -62.4 | 32.0  | 70.2 | 152 |
| 155.5      | 150.0      | 162.2      | 0.0             | 1.0   | 0.0   | 50.0                      | -65.0 | 29.6  | 71.4 | 155.5 | 0.0               | 1.0   | 0.0   | 50.1                        | -64.9 | 29.6  | 71.4 | 155 | 0.062             | 1.0   | 0.0   | 52.4                        | -59.6 | 34.5  | 68.9 | 150 | 0.0               | 1.0   | 0.151 | 50.7              | -62.0 | 19.9  | 65.2 | 162 |
| 160.7      | 157.5      | 169.0      | 0.0             | 1.0   | 0.125 | 50.5                      | -62.8 | 21.9  | 66.5 | 160.7 | 0.0               | 1.0   | 0.117 | 50.5                        | -62.9 | 22.4  | 66.9 | 160 | 0.0               | 1.0   | 0.035 | 50.2                        | -64.4 | 27.4  | 70.0 | 157 | 0.0               | 1.0   | 0.261 | 51.3              | -58.5 | 11.8  | 59.8 | 168 |
| 167.7      | 165.0      | 175.9      | 0.0             | 1.0   | 0.25  | 51.2                      | -58.9 | 12.7  | 60.3 | 167.7 | 0.0               | 1.0   | 0.25  | 51.2                        | -58.8 | 12.7  | 60.3 | 167 | 0.0               | 1.0   | 0.2   | 51.0                        | -60.5 | 16.2  | 62.8 | 165 | 0.0               | 1.0   | 0.364 | 52.0              | -55.0 | 3.9   | 55.2 | 175 |
| 176.7      | 172.5      | 182.7      | 0.0             | 1.0   | 0.375 | 52.0                      | -54.5 | 3.1   | 54.6 | 176.7 | 0.0               | 1.0   | 0.367 | 52.0                        | -54.8 | 3.7   | 55.1 | 176 | 0.0               | 1.0   | 0.309 | 51.6                        | -57.0 | 8.0   | 57.7 | 172 | 0.0               | 1.0   | 0.43  | 52.5              | -52.2 | -2.0  | 52.3 | 182 |
| 189.3      | 180.0      | 189.6      | 0.0             | 1.0   | 0.5   | 52.9                      | -48.6 | -8.0  | 49.3 | 189.3 | 0.0               | 1.0   | 0.5   | 53.0                        | -48.6 | -7.9  | 49.3 | 189 | 0.0               | 1.0   | 0.407 | 52.3                        | -53.2 | 0.0   | 53.3 | 180 | 0.0               | 1.0   | 0.502 | 53.0              | -48.5 | -8.1  | 49.3 | 189 |
| 203.2      | 187.5      | 196.4      | 0.0             | 1.0   | 0.625 | 54.0                      | -42.3 | -18.1 | 46.1 | 203.2 | 0.0               | 1.0   | 0.617 | 54.0                        | -42.8 | -17.5 | 46.3 | 202 | 0.0               | 1.0   | 0.477 | 52.8                        | -49.9 | -6.0  | 50.3 | 187 | 0.0               | 1.0   | 0.56  | 53.5              | -45.9 | -13.1 | 47.8 | 195 |
| 217.2      | 195.0      | 203.2      | 0.0             | 1.0   | 0.75  | 55.0                      | -36.0 | -27.4 | 45.3 | 217.2 | 0.0               | 1.0   | 0.75  | 55.0                        | -35.9 | -27.3 | 45.3 | 217 | 0.0               | 1.0   | 0.551 | 53.4                        | -46.3 | -12.3 | 48.0 | 195 | 0.0               | 1.0   | 0.626 | 54.1              | -42.3 | -18.1 | 46.1 | 203 |
| 228.3      | 202.5      | 210.1      | 0.0             | 1.0   | 0.875 | 55.8                      | -30.7 | -34.5 | 46.2 | 228.3 | 0.0               | 1.0   | 0.867 | 55.8                        | -31.0 | -34.0 | 46.1 | 227 | 0.0               | 1.0   | 0.614 | 54.0                        | -42.9 | -17.3 | 46.4 | 202 | 0.0               | 1.0   | 0.682 | 54.5              | -39.6 | -22.6 | 45.7 | 209 |
| 238.4      | 210.0      | 216.9      | 0.0             | 1.0   | 1.0   | 56.8                      | -25.5 | -41.5 | 48.7 | 238.4 | 0.0               | 1.0   | 1.0   | 56.8                        | -25.4 | -41.4 | 48.7 | 238 | 0.0               | 1.0   | 0.685 | 54.5                        | -39.5 | -22.8 | 45.7 | 210 | 0.0               | 1.0   | 0.747 | 55.0              | -36.1 | -27.2 | 45.3 | 216 |
| 242.9      | 217.5      | 223.8      | 0.0             | 0.875 | 1.0   | 54.1                      | -21.1 | -41.3 | 46.4 | 242.9 | 0.0               | 0.883 | 1.0   | 54.3                        | -21.4 | -41.3 | 46.6 | 242 | 0.0               | 1.0   | 0.747 | 55.0                        | -36.1 | -27.2 | 45.3 | 217 | 0.0               | 1.0   | 0.819 | 55.5              | -33.2 | -31.3 | 45.8 | 223 |
| 249.3      | 225.0      | 230.6      | 0.0             | 0.75  | 1.0   | 50.4                      | -15.5 | -41.1 | 43.9 | 249.3 | 0.0               | 0.75  | 1.0   | 50.4                        | -15.4 | -41.0 | 44.0 | 249 | 0.0               | 1.0   | 0.837 | 55.6                        | -32.4 | -32.4 | 45.9 | 225 | 0.0               | 1.0   | 0.904 | 56.1              | -29.6 | -36.1 | 46.8 | 230 |
| 256.9      | 232.5      | 237.5      | 0.0             | 0.625 | 1.0   | 46.5                      | -9.4  | -40.8 | 41.9 | 256.9 | 0.0               | 0.633 | 1.0   | 46.8                        | -9.8  | -40.8 | 42.1 | 256 | 0.0               | 1.0   | 0.92  | 56.2                        | -28.9 | -37.0 | 47.1 | 232 | 0.0               | 1.0   | 0.983 | 56.7              | -26.2 | -40.5 | 48.4 | 237 |
| 268.2      | 240.0      | 244.3      | 0.0             | 0.5   | 1.0   | 41.7                      | -1.2  | -40.6 | 40.6 | 268.2 | 0.0               | 0.5   | 1.0   | 41.7                        | -1.1  | -40.6 | 40.7 | 268 | 0.0               | 0.956 | 1.0   | 55.9                        | -23.9 | -41.4 | 48.0 | 240 | 0.0               | 0.847 | 1.0   | 53.3              | -19.8 | -41.3 | 45.9 | 244 |
| 278.6      | 247.5      | 251.2      | 0.0             | 0.375 | 1.0   | 37.3                      | 6.1   | -40.2 | 40.7 | 278.6 | 0.0               | 0.383 | 1.0   | 37.6                        | 5.6   | -40.2 | 40.7 | 277 | 0.0               | 0.795 | 1.0   | 51.8                        | -17.4 | -41.2 | 44.9 | 247 | 0.0               | 0.726 | 1.0   | 49.7              | -14.3 | -41.1 | 43.6 | 250 |
| 289.6      | 255.0      | 258.0      | 0.0             | 0.25  | 1.0   | 32.8                      | 14.3  | -40.2 | 42.7 | 289.6 | 0.0               | 0.25  | 1.0   | 32.9                        | 14.4  | -40.1 | 42.7 | 289 | 0.0               | 0.657 | 1.0   | 47.5                        | -10.9 | -40.9 | 42.5 | 255 | 0.0               | 0.613 | 1.0   | 46.1              | -8.6  | -40.8 | 41.9 | 258 |
| 299.0      | 262.5      | 264.8      | 0.0             | 0.125 | 1.0   | 28.6                      | 22.4  | -40.2 | 46.1 | 299.0 | 0.0               | 0.133 | 1.0   | 28.9                        | 21.9  | -40.2 | 45.9 | 298 | 0.0               | 0.569 | 1.0   | 44.4                        | -5.7  | -40.9 | 41.4 | 262 | 0.0               | 0.542 | 1.0   | 43.4              | -3.9  | -40.8 | 41.1 | 264 |
| 306.2      | 270.0      | 271.7      | 0.0             | 0.0   | 1.0   | 25.0                      | 29.5  | -40.4 | 50.0 | 306.2 | 0.0               | 0.0   | 1.0   | 25.1                        | 29.6  | -40.3 | 50.1 | 306 | 0.0               | 0.479 | 1.0   | 41.0                        | 0.0   | -40.6 | 40.7 | 270 | 0.0               | 0.458 | 1.0   | 40.3              | 1.2   | -40   |      |     |

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| $h_{ab,d}$ | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd64M}$ |       |       | $LAB^*_{dd64M} (x=LabCh)$ |       |       |      |       |  |  | $rgb^*_{dex361M}$ |       |       | $LAB^*_{dex361M}$ |      |       |       |      |      | $rgb^*_{dd}$ | $rgb^*_{ds}$ | $rgb^*_{de}$ |  |
|------------|------------|------------|-----------------|-------|-------|---------------------------|-------|-------|------|-------|--|--|-------------------|-------|-------|-------------------|------|-------|-------|------|------|--------------|--------------|--------------|--|
| 32.3       | 30.0       | 25.4       | 1.0             | 0.0   | 0.0   | 45.4                      | 70.9  | 44.8  | 83.9 | 32.3  |  |  |                   | 1.0   | 0.0   | 0.255             | 45.7 | 72.2  | 34.4  | 80.0 | 25   |              |              |              |  |
| 38.1       | 37.5       | 33.8       | 1.0             | 0.125 | 0.0   | 48.9                      | 62.8  | 49.4  | 79.9 | 38.1  |  |  |                   | 1.0   | 0.021 | 0.0               | 46.0 | 69.6  | 45.7  | 83.3 | 33   |              |              |              |  |
| 46.8       | 45.0       | 42.1       | 1.0             | 0.25  | 0.0   | 53.6                      | 51.9  | 55.5  | 76.0 | 46.8  |  |  |                   | 1.0   | 0.183 | 0.0               | 51.1 | 57.9  | 52.5  | 78.1 | 42   |              |              |              |  |
| 56.9       | 52.5       | 50.5       | 1.0             | 0.375 | 0.0   | 59.1                      | 40.3  | 62.0  | 74.0 | 56.9  |  |  |                   | 1.0   | 0.288 | 0.0               | 55.4 | 48.5  | 57.8  | 75.4 | 49   |              |              |              |  |
| 67.1       | 60.0       | 58.8       | 1.0             | 0.5   | 0.0   | 64.9                      | 28.9  | 68.6  | 74.5 | 67.1  |  |  |                   | 1.0   | 0.398 | 0.0               | 60.3 | 38.3  | 63.5  | 74.1 | 58   |              |              |              |  |
| 78.6       | 67.5       | 67.2       | 1.0             | 0.625 | 0.0   | 72.1                      | 15.4  | 77.1  | 78.6 | 78.6  |  |  |                   | 1.0   | 0.494 | 0.0               | 64.6 | 29.5  | 68.4  | 74.5 | 66   |              |              |              |  |
| 86.2       | 75.0       | 75.6       | 1.0             | 0.75  | 0.0   | 77.9                      | 5.4   | 83.8  | 84.0 | 86.2  |  |  |                   | 1.0   | 0.592 | 0.0               | 70.2 | 19.3  | 75.2  | 77.6 | 75   |              |              |              |  |
| 92.1       | 82.5       | 83.9       | 1.0             | 0.875 | 0.0   | 83.4                      | -3.4  | 90.2  | 90.2 | 92.1  |  |  |                   | 1.0   | 0.703 | 0.0               | 75.8 | 9.4   | 81.5  | 82.0 | 83   |              |              |              |  |
| 96.1       | 90.0       | 92.3       | 1.0             | 1.0   | 0.0   | 87.8                      | -10.2 | 95.4  | 96.0 | 96.1  |  |  |                   | 1.0   | 0.879 | 0.0               | 83.6 | -3.6  | 90.4  | 90.5 | 92   |              |              |              |  |
| 98.8       | 97.5       | 101.0      | 0.875           | 1.0   | 0.0   | 84.3                      | -13.9 | 89.2  | 90.3 | 98.8  |  |  |                   | 0.807 | 1.0   | 0.0               | 82.4 | -15.8 | 86.2  | 87.7 | 100  |              |              |              |  |
| 101.8      | 105.0      | 109.7      | 0.75            | 1.0   | 0.0   | 80.7                      | -17.5 | 83.5  | 85.3 | 101.8 |  |  |                   | 0.583 | 1.0   | 0.0               | 73.7 | -26.1 | 72.7  | 77.3 | 109  |              |              |              |  |
| 107.6      | 112.5      | 118.5      | 0.625           | 1.0   | 0.0   | 75.3                      | -24.0 | 75.7  | 79.4 | 107.6 |  |  |                   | 0.434 | 1.0   | 0.0               | 68.0 | -32.9 | 62.2  | 70.5 | 117  |              |              |              |  |
| 114.0      | 120.0      | 127.2      | 0.5             | 1.0   | 0.0   | 70.6                      | -29.7 | 66.5  | 72.8 | 114.0 |  |  |                   | 0.322 | 1.0   | 0.0               | 62.6 | -40.8 | 53.8  | 67.6 | 127  |              |              |              |  |
| 121.4      | 127.5      | 136.0      | 0.375           | 1.0   | 0.0   | 65.7                      | -35.6 | 58.3  | 68.3 | 121.4 |  |  |                   | 0.249 | 1.0   | 0.0               | 58.4 | -47.4 | 46.8  | 66.6 | 135  |              |              |              |  |
| 135.3      | 135.0      | 144.7      | 0.25            | 1.0   | 0.0   | 58.4                      | -47.3 | 46.8  | 66.6 | 135.3 |  |  |                   | 0.122 | 1.0   | 0.0               | 54.6 | -54.2 | 38.4  | 66.5 | 144  |              |              |              |  |
| 144.4      | 142.5      | 153.4      | 0.125           | 1.0   | 0.0   | 54.7                      | -53.9 | 38.5  | 66.3 | 144.4 |  |  |                   | 0.03  | 1.0   | 0.0               | 51.2 | -62.4 | 32.0  | 70.2 | 152  |              |              |              |  |
| 155.5      | 150.0      | 162.2      | 0.0             | 1.0   | 0.0   | 50.0                      | -65.0 | 29.6  | 71.4 | 155.5 |  |  |                   | 0.0   | 1.0   | 0.151             | 50.7 | -62.0 | 19.9  | 65.2 | 162  |              |              |              |  |
| 160.7      | 157.5      | 169.0      | 0.0             | 1.0   | 0.125 | 50.5                      | -62.8 | 21.9  | 66.5 | 160.7 |  |  |                   | 0.0   | 1.0   | 0.261             | 51.3 | -58.5 | 11.8  | 59.8 | 168  |              |              |              |  |
| 167.7      | 165.0      | 175.9      | 0.0             | 1.0   | 0.25  | 51.2                      | -58.9 | 12.7  | 60.3 | 167.7 |  |  |                   | 0.0   | 1.0   | 0.364             | 52.0 | -55.0 | 3.9   | 55.2 | 175  |              |              |              |  |
| 176.7      | 172.5      | 182.7      | 0.0             | 1.0   | 0.375 | 52.0                      | -54.5 | 3.1   | 54.6 | 176.7 |  |  |                   | 0.0   | 1.0   | 0.43              | 52.5 | -52.2 | -2.0  | 52.3 | 182  |              |              |              |  |
| 189.3      | 180.0      | 189.6      | 0.0             | 1.0   | 0.5   | 52.9                      | -48.6 | -8.0  | 49.3 | 189.3 |  |  |                   | 0.0   | 1.0   | 0.502             | 53.0 | -48.5 | -8.1  | 49.3 | 189  |              |              |              |  |
| 203.2      | 187.5      | 196.4      | 0.0             | 1.0   | 0.625 | 54.0                      | -42.3 | -18.1 | 46.1 | 203.2 |  |  |                   | 0.0   | 1.0   | 0.56              | 53.5 | -45.9 | -13.1 | 47.8 | 195  |              |              |              |  |
| 217.2      | 195.0      | 203.2      | 0.0             | 1.0   | 0.75  | 55.0                      | -36.0 | -27.4 | 45.3 | 217.2 |  |  |                   | 0.0   | 1.0   | 0.626             | 54.1 | -42.3 | -18.1 | 46.1 | 203  |              |              |              |  |
| 228.3      | 202.5      | 210.1      | 0.0             | 1.0   | 0.875 | 55.8                      | -30.7 | -34.5 | 46.2 | 228.3 |  |  |                   | 0.0   | 1.0   | 0.682             | 54.5 | -39.6 | -22.6 | 45.7 | 209  |              |              |              |  |
| 238.4      | 210.0      | 216.9      | 0.0             | 1.0   | 1.0   | 56.8                      | -25.5 | -41.5 | 48.7 | 238.4 |  |  |                   | 0.0   | 1.0   | 0.747             | 55.0 | -36.1 | -27.2 | 45.3 | 216  |              |              |              |  |
| 242.9      | 217.5      | 223.8      | 0.0             | 0.875 | 1.0   | 54.1                      | -21.1 | -41.3 | 46.4 | 242.9 |  |  |                   | 0.0   | 1.0   | 0.819             | 55.5 | -33.2 | -31.3 | 45.8 | 223  |              |              |              |  |
| 249.3      | 225.0      | 230.6      | 0.0             | 0.75  | 1.0   | 50.4                      | -15.5 | -41.1 | 43.9 | 249.3 |  |  |                   | 0.0   | 1.0   | 0.904             | 56.1 | -29.6 | -36.1 | 46.8 | 230  |              |              |              |  |
| 256.9      | 232.5      | 237.5      | 0.0             | 0.625 | 1.0   | 46.5                      | -9.4  | -40.8 | 41.9 | 256.9 |  |  |                   | 0.0   | 1.0   | 0.983             | 56.7 | -26.2 | -40.5 | 48.4 | 237  |              |              |              |  |
| 268.2      | 240.0      | 244.3      | 0.0             | 0.5   | 1.0   | 41.7                      | -1.2  | -40.6 | 40.6 | 268.2 |  |  |                   | 0.0   | 0.847 | 1.0               | 53.3 | -19.8 | -41.3 | 45.9 | 244  |              |              |              |  |
| 278.6      | 247.5      | 251.2      | 0.0             | 0.375 | 1.0   | 37.3                      | 6.1   | -40.2 | 40.7 | 278.6 |  |  |                   | 0.0   | 0.726 | 1.0               | 49.7 | -14.3 | -41.1 | 43.6 | 250  |              |              |              |  |
| 289.6      | 255.0      | 258.0      | 0.0             | 0.25  | 1.0   | 32.8                      | 14.3  | -40.2 | 42.7 | 289.6 |  |  |                   | 0.0   | 0.613 | 1.0               | 46.1 | -8.6  | -40.8 | 41.9 | 258  |              |              |              |  |
| 299.0      | 262.5      | 264.8      | 0.0             | 0.125 | 1.0   | 28.6                      | 22.4  | -40.2 | 46.1 | 299.0 |  |  |                   | 0.0   | 0.542 | 1.0               | 43.4 | -3.9  | -40.8 | 41.1 | 264  |              |              |              |  |
| 306.2      | 270.0      | 271.7      | 0.0             | 0.0   | 1.0   | 25.0                      | 29.5  | -40.4 | 50.0 | 306.2 |  |  |                   | 0.0   | 0.458 | 1.0               | 40.3 | 1.2   | -40.6 | 40.7 | 271  |              |              |              |  |
| 314.7      | 277.5      | 278.8      | 0.125           | 0.0   | 1.0   | 27.9                      | 36.0  | -36.4 | 51.2 | 314.7 |  |  |                   | 0.0   | 0.378 | 1.0               | 37.5 | 5.9   | -40.2 | 40.7 | 278  |              |              |              |  |
| 322.1      | 285.0      | 285.9      | 0.25            | 0.0   | 1.0   | 28.8                      | 41.9  | -32.5 | 53.1 | 322.1 |  |  |                   | 0.0   | 0.292 | 1.0               | 34.4 | 11.6  | -40.3 | 42.0 | 285  |              |              |              |  |
| 333.3      | 292.5      | 293.0      | 0.375           | 0.0   | 1.0   | 32.7                      | 51.8  | -26.0 | 58.0 | 333.3 |  |  |                   | 0.0   | 0.211 | 1.0               | 31.5 | 16.8  | -40.3 | 43.8 | 292  |              |              |              |  |
| 340.5      | 300.0      | 300.1      | 0.5             | 0.0   | 1.0   | 35.6                      | 58.6  | -20.7 | 62.1 | 340.5 |  |  |                   | 0.0   | 0.106 | 1.0               | 28.1 | 23.5  | -40.3 | 46.7 | 300  |              |              |              |  |
| 347.9      | 307.5      | 307.2      | 0.625           | 0.0   | 1.0   | 38.1                      | 65.4  | -14.0 | 66.9 | 347.9 |  |  |                   | 0.009 | 0.0   | 1.0               | 25.3 | 30.1  | -40.1 | 50.2 | 306  |              |              |              |  |
| 352.5      | 315.0      | 314.3      | 0.75            | 0.0   | 1.0   | 41.8                      | 71.0  | -9.2  | 71.6 | 352.5 |  |  |                   | 0.12  | 0.0   | 1.0               | 27.8 | 35.8  | -36.5 | 51.2 | 314  |              |              |              |  |
| 356.1      | 322.5      | 321.4      | 0.875           | 0.0   | 1.0   | 44.2                      | 75.2  | -5.0  | 75.3 | 356.1 |  |  |                   | 0.231 | 0.0   | 1.0               | 28.7 | 41.1  | -33.2 | 52.9 | 321  |              |              |              |  |
| 359.8      | 330.0      | 328.6      | 1.0             | 0.0   | 1.0   | 46.1                      | 79.3  | -0.2  | 79.3 | 359.8 |  |  |                   | 0.322 | 0.0   | 1.0               | 31.1 | 47.8  | -29.1 | 56.0 | 328  |              |              |              |  |
| 363.0      | 337.5      | 335.7      | 1.0             | 0.0   | 0.875 | 45.9                      | 78.2  | 4.1   | 78.3 | 363.0 |  |  |                   | 0.408 | 0.0   | 1.0               | 33.5 | 53.7  | -24.7 | 59.1 | 335  |              |              |              |  |
| 366.4      | 345.0      | 342.8      | 1.0             | 0.0   | 0.75  | 45.9                      | 77.1  | 8.6   | 77.6 | 366.4 |  |  |                   | 0.539 | 0.0   | 1.0               | 36.4 | 60.8  | -18.7 | 63.7 | 342  |              |              |              |  |
| 371.1      | 352.5      | 349.9      | 1.0             | 0.0   | 0.625 | 46.0                      | 75.6  | 14.8  | 77.0 | 371.1 |  |  |                   | 0.667 | 0.0   | 1.0               | 39.3 | 67.4  | -12.4 | 68.5 | 349  |              |              |              |  |
| 375.9      | 360.0      | 357.0      | 1.0             | 0.0   | 0.5   | 45.9                      | 74.2  | 21.1  | 77.1 | 375.9 |  |  |                   | 0.736 | 0.0   | 1.0               | 41.4 | 70.5  | -9.7  | 71.1 | 352  |              |              |              |  |
| 381.2      | 367.5      | 364.1      | 1.0             | 0.0   | 0.375 | 45.8                      | 72.9  | 28.3  | 78.3 | 381.2 |  |  |                   | 0.81  | 0.0   | 1.0               | 46.1 | 79.3  | -0.1  | 79.3 | 359  |              |              |              |  |
| 385.6      | 375.0      | 371.2      | 1.0             | 0.0   | 0.25  | 45.6                      | 72.1  | 34.6  | 80.0 | 385.6 |  |  |                   | 0.687 | 0.0   | 1.0               | 46.0 | 76.5  | 11.8  | 77.4 | 368  |              |              |              |  |
| 389.3      | 382.5      | 378.3      | 1.0             | 0.0   | 0.125 | 45.5                      | 71.4  | 40.1  | 81.9 | 389.3 |  |  |                   | 0.485 | 0.0   | 1.0               | 48.5 | 45.9  | 74.1  | 22.0 | 77.3 | 376          |              |              |  |
| 392.3      | 390.0      | 385.4      | 1.0             | 0.0   | 0.0   | 45.4                      | 70.9  | 44.8  | 83.9 | 392.3 |  |  |                   | 1.0   | 0.0   | 0.255             | 45.7 | 72.2  | 34.4  | 80.0 | 385  |              |              |              |  |

1-103831-L0

QE170-72

LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

Output: Offset standard print; separation cmy0\*, D65, page 9/33

TUB-test chart QE17; hue code:  $H^*_d=R50Y_d$   
48 step hue circles;  $rgb-LabCh^*$  tables

input:  $rgb/cmyk \rightarrow rgb_{dd}$   
output: 3D-linearization to  $cmy0^*_{dd}$

TUB registration: 20130201-QE17/QE17L0FA.TXT /PS  
application for measurement of offset print output, separation cmy0\* (CMY0)  
TUB material: code=rha4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<sub>s</sub>:  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;

Six hue angles of the device colours RYGBM<sub>d</sub>:  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours RYGBM<sub>e</sub>:  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| $h_{ab,d}$ | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd361M}$ |       |     |      |      | $LAB^*_{ddx361Mi}(x=LabCh)$ |      |    |  |     | $R_d$ | $rgb^*_{ds361Mi}$ |      |      |      |      | $LAB^*_{dsx361Mi}(x=LabCh)$ |  |     |       |     | $R_s$ | $rgb^*_{dd361Mi}$ |       |       |      |      | $rgb^*_{de361Mi}$ |      |    |  |     | $LAB^*_{dex361Mi}(x=LabCh)$ |     |  |  |  | $R_e$ | $rgb^*_{dd361Mi}$ |  |  | $rgb^*_{dd}$ | $rgb^*_{ds}$ | $rgb^*_{de}$ |
|------------|------------|------------|------------------|-------|-----|------|------|-----------------------------|------|----|--|-----|-------|-------------------|------|------|------|------|-----------------------------|--|-----|-------|-----|-------|-------------------|-------|-------|------|------|-------------------|------|----|--|-----|-----------------------------|-----|--|--|--|-------|-------------------|--|--|--------------|--------------|--------------|
| 32         | 30         | 25         | 1.0              | 0.0   | 0.0 | 45.4 | 70.9 | 44.8                        | 83.9 | 32 |  | 1.0 | 0.0   | 0.096             | 45.5 | 71.4 | 41.2 | 82.4 | 30                          |  | 1.0 | 0.0   | 0.0 |       | 1.0               | 0.0   | 0.255 | 45.7 | 72.2 | 34.4              | 80.0 | 25 |  | 1.0 | 0.0                         | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 33         | 31         | 26         | 1.0              | 0.016 | 0.0 | 45.9 | 69.8 | 45.5                        | 83.4 | 33 |  | 1.0 | 0.0   | 0.055             | 45.5 | 71.2 | 42.8 | 83.1 | 31                          |  | 1.0 | 0.017 | 0.0 |       | 1.0               | 0.0   | 0.218 | 45.6 | 72.0 | 36.1              | 80.6 | 26 |  | 1.0 | 0.017                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 33         | 32         | 27         | 1.0              | 0.033 | 0.0 | 46.3 | 68.8 | 46.1                        | 82.8 | 33 |  | 1.0 | 0.0   | 0.013             | 45.5 | 71.0 | 44.4 | 83.7 | 32                          |  | 1.0 | 0.033 | 0.0 |       | 1.0               | 0.0   | 0.18  | 45.6 | 71.8 | 37.7              | 81.1 | 27 |  | 1.0 | 0.033                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 34         | 33         | 28         | 1.0              | 0.05  | 0.0 | 46.8 | 67.7 | 46.8                        | 82.3 | 34 |  | 1.0 | 0.015 | 0.0               | 45.9 | 70.0 | 45.5 | 83.5 | 33                          |  | 1.0 | 0.05  | 0.0 |       | 1.0               | 0.0   | 0.142 | 45.6 | 71.6 | 39.4              | 81.7 | 28 |  | 1.0 | 0.05                        | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 35         | 34         | 29         | 1.0              | 0.066 | 0.0 | 47.3 | 66.6 | 47.4                        | 81.8 | 35 |  | 1.0 | 0.036 | 0.0               | 46.5 | 68.6 | 46.3 | 82.8 | 34                          |  | 1.0 | 0.067 | 0.0 |       | 1.0               | 0.0   | 0.099 | 45.5 | 71.4 | 41.1              | 82.4 | 29 |  | 1.0 | 0.067                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 36         | 35         | 31         | 1.0              | 0.083 | 0.0 | 47.7 | 65.5 | 48.0                        | 81.2 | 36 |  | 1.0 | 0.057 | 0.0               | 47.1 | 67.3 | 47.1 | 82.1 | 35                          |  | 1.0 | 0.083 | 0.0 |       | 1.0               | 0.0   | 0.053 | 45.5 | 71.2 | 42.9              | 83.1 | 31 |  | 1.0 | 0.083                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 36         | 36         | 32         | 1.0              | 0.1   | 0.0 | 48.2 | 64.4 | 48.5                        | 80.7 | 36 |  | 1.0 | 0.079 | 0.0               | 47.6 | 65.9 | 47.9 | 81.4 | 36                          |  | 1.0 | 0.1   | 0.0 |       | 1.0               | 0.0   | 0.006 | 45.5 | 71.0 | 44.6              | 83.8 | 32 |  | 1.0 | 0.1                         | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 37         | 37         | 33         | 1.0              | 0.116 | 0.0 | 48.6 | 63.3 | 49.1                        | 80.2 | 37 |  | 1.0 | 0.1   | 0.0               | 48.2 | 64.5 | 48.6 | 80.7 | 37                          |  | 1.0 | 0.117 | 0.0 |       | 1.0               | 0.021 | 0.0   | 46.0 | 69.6 | 45.7              | 83.3 | 33 |  | 1.0 | 0.117                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 38         | 38         | 34         | 1.0              | 0.133 | 0.0 | 49.2 | 62.1 | 49.8                        | 79.6 | 38 |  | 1.0 | 0.121 | 0.0               | 48.8 | 63.1 | 49.3 | 80.1 | 38                          |  | 1.0 | 0.133 | 0.0 |       | 1.0               | 0.044 | 0.0   | 46.7 | 68.1 | 46.6              | 82.5 | 34 |  | 1.0 | 0.133                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 39         | 39         | 35         | 1.0              | 0.15  | 0.0 | 49.8 | 60.7 | 50.7                        | 79.1 | 39 |  | 1.0 | 0.137 | 0.0               | 49.4 | 61.8 | 50.1 | 79.6 | 39                          |  | 1.0 | 0.15  | 0.0 |       | 1.0               | 0.068 | 0.0   | 47.4 | 66.6 | 47.5              | 81.8 | 35 |  | 1.0 | 0.15                        | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 41         | 40         | 36         | 1.0              | 0.166 | 0.0 | 50.5 | 59.2 | 51.6                        | 78.6 | 41 |  | 1.0 | 0.151 | 0.0               | 49.9 | 60.6 | 50.9 | 79.1 | 40                          |  | 1.0 | 0.167 | 0.0 |       | 1.0               | 0.092 | 0.0   | 48.0 | 65.0 | 48.3              | 81.0 | 36 |  | 1.0 | 0.167                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 42         | 41         | 37         | 1.0              | 0.183 | 0.0 | 51.1 | 57.8 | 52.5                        | 78.1 | 42 |  | 1.0 | 0.166 | 0.0               | 50.5 | 59.4 | 51.6 | 78.7 | 41                          |  | 1.0 | 0.183 | 0.0 |       | 1.0               | 0.116 | 0.0   | 48.7 | 63.5 | 49.1              | 80.2 | 37 |  | 1.0 | 0.183                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 43         | 42         | 38         | 1.0              | 0.2   | 0.0 | 51.7 | 56.3 | 53.3                        | 77.5 | 43 |  | 1.0 | 0.18  | 0.0               | 51.0 | 58.1 | 52.3 | 78.2 | 42                          |  | 1.0 | 0.2   | 0.0 |       | 1.0               | 0.135 | 0.0   | 49.3 | 62.0 | 49.9              | 79.6 | 38 |  | 1.0 | 0.2                         | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 44         | 43         | 39         | 1.0              | 0.216 | 0.0 | 52.4 | 54.9 | 54.0                        | 77.0 | 44 |  | 1.0 | 0.194 | 0.0               | 51.6 | 56.9 | 53.0 | 77.8 | 43                          |  | 1.0 | 0.217 | 0.0 |       | 1.0               | 0.151 | 0.0   | 49.9 | 60.7 | 50.8              | 79.1 | 39 |  | 1.0 | 0.217                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 45         | 44         | 41         | 1.0              | 0.233 | 0.0 | 53.0 | 53.4 | 54.8                        | 76.5 | 45 |  | 1.0 | 0.209 | 0.0               | 52.1 | 55.6 | 53.7 | 77.3 | 44                          |  | 1.0 | 0.233 | 0.0 |       | 1.0               | 0.167 | 0.0   | 50.5 | 59.3 | 51.7              | 78.6 | 41 |  | 1.0 | 0.233                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 46         | 45         | 42         | 1.0              | 0.25  | 0.0 | 53.6 | 51.9 | 55.5                        | 76.0 | 46 |  | 1.0 | 0.223 | 0.0               | 52.7 | 54.4 | 54.4 | 76.9 | 45                          |  | 1.0 | 0.25  | 0.0 |       | 1.0               | 0.183 | 0.0   | 51.1 | 57.9 | 52.5              | 78.1 | 42 |  | 1.0 | 0.25                        | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 48         | 46         | 43         | 1.0              | 0.266 | 0.0 | 54.4 | 50.4 | 56.5                        | 75.7 | 48 |  | 1.0 | 0.237 | 0.0               | 53.2 | 53.1 | 55.0 | 76.4 | 46                          |  | 1.0 | 0.267 | 0.0 |       | 1.0               | 0.198 | 0.0   | 51.7 | 56.5 | 53.2              | 77.6 | 43 |  | 1.0 | 0.267                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 49         | 47         | 44         | 1.0              | 0.283 | 0.0 | 55.1 | 48.9 | 57.4                        | 75.4 | 49 |  | 1.0 | 0.251 | 0.0               | 53.7 | 51.8 | 55.6 | 76.0 | 47                          |  | 1.0 | 0.283 | 0.0 |       | 1.0               | 0.214 | 0.0   | 52.3 | 55.1 | 54.0              | 77.1 | 44 |  | 1.0 | 0.283                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 50         | 48         | 45         | 1.0              | 0.3   | 0.0 | 55.8 | 47.4 | 58.4                        | 75.2 | 50 |  | 1.0 | 0.264 | 0.0               | 54.3 | 50.7 | 56.3 | 75.8 | 48                          |  | 1.0 | 0.3   | 0.0 |       | 1.0               | 0.23  | 0.0   | 52.9 | 53.7 | 54.7              | 76.6 | 45 |  | 1.0 | 0.3                         | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 52         | 49         | 46         | 1.0              | 0.316 | 0.0 | 56.6 | 45.8 | 59.2                        | 74.9 | 52 |  | 1.0 | 0.276 | 0.0               | 54.8 | 49.6 | 57.1 | 75.6 | 49                          |  | 1.0 | 0.317 | 0.0 |       | 1.0               | 0.246 | 0.0   | 53.5 | 52.3 | 55.4              | 76.1 | 46 |  | 1.0 | 0.317                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 53         | 50         | 47         | 1.0              | 0.333 | 0.0 | 57.3 | 44.2 | 60.1                        | 74.6 | 53 |  | 1.0 | 0.288 | 0.0               | 55.4 | 48.5 | 57.8 | 75.4 | 50                          |  | 1.0 | 0.333 | 0.0 |       | 1.0               | 0.261 | 0.0   | 54.2 | 51.0 | 56.2              | 75.9 | 47 |  | 1.0 | 0.333                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 54         | 51         | 48         | 1.0              | 0.35  | 0.0 | 58.0 | 42.7 | 60.9                        | 74.4 | 54 |  | 1.0 | 0.301 | 0.0               | 55.9 | 47.3 | 58.5 | 75.2 | 51                          |  | 1.0 | 0.35  | 0.0 |       | 1.0               | 0.274 | 0.0   | 54.8 | 49.8 | 57.0              | 75.6 | 48 |  | 1.0 | 0.35                        | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 56         | 52         | 49         | 1.0              | 0.366 | 0.0 | 58.8 | 41.1 | 61.7                        | 74.1 | 56 |  | 1.0 | 0.313 | 0.0               | 56.5 | 46.2 | 59.1 | 75.0 | 52                          |  | 1.0 | 0.367 | 0.0 |       | 1.0               | 0.288 | 0.0   | 55.4 | 48.5 | 57.8              | 75.4 | 49 |  | 1.0 | 0.367                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 57         | 53         | 51         | 1.0              | 0.383 | 0.0 | 59.5 | 39.5 | 62.5                        | 74.0 | 57 |  | 1.0 | 0.326 | 0.0               | 57.0 | 45.0 | 59.8 | 74.8 | 53                          |  | 1.0 | 0.383 | 0.0 |       | 1.0               | 0.302 | 0.0   | 56.0 | 47.2 | 58.5              | 75.2 | 51 |  | 1.0 | 0.383                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 59         | 54         | 52         | 1.0              | 0.4   | 0.0 | 60.3 | 38.1 | 63.5                        | 74.1 | 59 |  | 1.0 | 0.338 | 0.0               | 57.6 | 43.9 | 60.4 | 74.6 | 54                          |  | 1.0 | 0.4   | 0.0 |       | 1.0               | 0.316 | 0.0   | 56.6 | 45.9 | 59.3              | 75.0 | 52 |  | 1.0 | 0.4                         | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 60         | 55         | 53         | 1.0              | 0.416 | 0.0 | 61.0 | 36.6 | 64.5                        | 74.1 | 60 |  | 1.0 | 0.35  | 0.0               | 58.1 | 42.7 | 61.0 | 74.4 | 55                          |  | 1.0 | 0.417 | 0.0 |       | 1.0               | 0.33  | 0.0   | 57.2 | 44.6 | 60.0              | 74.8 | 53 |  | 1.0 | 0.417                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 61         | 56         | 54         | 1.0              | 0.433 | 0.0 | 61.8 | 35.1 | 65.4                        | 74.2 | 61 |  | 1.0 | 0.363 | 0.0               | 58.6 | 41.5 | 61.5 | 74.2 | 56                          |  | 1.0 | 0.433 | 0.0 |       | 1.0               | 0.343 | 0.0   | 57.8 | 43.3 | 60.6              | 74.5 | 54 |  | 1.0 | 0.433                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 63         | 57         | 55         | 1.0              | 0.45  | 0.0 | 62.6 | 33.6 | 66.2                        | 74.3 | 63 |  | 1.0 | 0.375 | 0.0               | 59.2 | 40.3 | 62.1 | 74.0 | 57                          |  | 1.0 | 0.45  | 0.0 |       | 1.0               | 0.357 | 0.0   | 58.4 | 42.0 | 61.3              | 74.3 | 55 |  | 1.0 | 0.45                        | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 64         | 58         | 56         | 1.0              | 0.466 | 0.0 | 63.3 | 32.0 | 67.1                        | 74.4 | 64 |  | 1.0 | 0.387 | 0.0               | 59.8 | 39.3 | 62.8 | 74.1 | 58                          |  | 1.0 | 0.467 | 0.0 |       | 1.0               | 0.371 | 0.0   | 59.0 | 40.7 | 61.9              | 74.1 | 56 |  | 1.0 | 0.467                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 65         | 59         | 57         | 1.0              | 0.483 | 0.0 | 64.1 | 30.5 | 67.9                        | 74.4 | 65 |  | 1.0 | 0.4   | 0.0               | 60.3 | 38.2 | 63.5 | 74.1 | 59                          |  | 1.0 | 0.483 | 0.0 |       | 1.0               | 0.385 | 0.0   | 59.6 | 39.5 | 62.7              | 74.1 | 57 |  | 1.0 | 0.483                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 67         | 60         | 58         | 1.0              | 0.5   | 0.0 | 64.9 | 28.9 | 68.6                        | 74.5 | 67 |  | 1.0 | 0.412 | 0.0               | 60.9 | 37.1 | 64.2 | 74.2 | 60                          |  | 1.0 | 0.5   | 0.0 |       | 1.0               | 0.398 | 0.0   | 60.3 | 38.3 | 63.5              | 74.1 | 58 |  | 1.0 | 0.5                         | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 68         | 61         | 60         | 1.0              | 0.516 | 0.0 | 65.8 | 27.2 | 69.9                        | 75.0 | 68 |  | 1.0 | 0.424 | 0.0               | 61.4 | 36.0 | 64.9 | 74.2 | 61                          |  | 1.0 | 0.517 | 0.0 |       | 1.0               | 0.412 | 0.0   | 60.9 | 37.1 | 64.2              | 74.2 | 60 |  | 1.0 | 0.517                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 70         | 62         | 61         | 1.0              | 0.533 | 0.0 | 66.8 | 25.5 | 71.1                        | 75.6 | 70 |  | 1.0 | 0.436 | 0.0               | 62.0 | 34.9 | 65.6 | 74.3 | 62                          |  | 1.0 | 0.533 | 0.0 |       | 1.0               | 0.426 | 0.0   | 61.5 | 35.8 | 65.0              | 74.2 | 61 |  | 1.0 | 0.533                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 71         | 63         | 62         | 1.0              | 0.55  | 0.0 | 67.7 | 23.8 | 72.3                        | 76.1 | 71 |  | 1.0 | 0.449 | 0.0               | 62.6 | 33.7 | 66.2 | 74.3 | 63                          |  | 1.0 | 0.55  | 0.0 |       | 1.0               | 0.439 | 0.0   | 62.1 | 34.6 | 65.7              | 74.3 | 62 |  | 1.0 | 0.55                        | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 73         | 64         | 63         | 1.0              | 0.566 | 0.0 | 68.7 | 22.0 | 73.5                        | 76.7 | 73 |  | 1.0 | 0.461 | 0.0               | 63.1 | 32.6 | 66.9 | 74.4 | 64                          |  | 1.0 | 0.567 | 0.0 |       | 1.0               | 0.453 | 0.0   | 62.8 | 33.3 | 66.4              | 74.3 | 63 |  | 1.0 | 0.567                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 74         | 65         | 64         | 1.0              | 0.583 | 0.0 | 69.7 | 20.2 | 74.6                        | 77.3 | 74 |  | 1.0 | 0.473 | 0.0               | 63.7 | 31.5 | 67.5 | 74.4 | 65                          |  | 1.0 | 0.583 | 0.0 |       | 1.0               | 0.467 | 0.0   | 63.4 | 32.1 | 67.1              | 74.4 | 64 |  | 1.0 | 0.583                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 76         | 66         | 65         | 1.0              | 0.6   | 0.0 | 70.6 | 18.3 | 75.6                        | 77.8 | 76 |  | 1.0 | 0.486 | 0.0               | 64.2 | 30.3 | 68.0 | 74.5 | 66                          |  | 1.0 | 0.6   | 0.0 |       | 1.0               | 0.48  | 0.0   | 64.0 | 30.8 | 67.8              | 74.5 | 65 |  | 1.0 | 0.6                         | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 77         | 67         | 66         | 1.0              | 0.616 | 0.0 | 71.6 | 16.4 | 76.6                        | 78.4 | 77 |  | 1.0 | 0.498 | 0.0               | 64.8 | 29.1 | 68.6 | 74.5 | 67                          |  | 1.0 | 0.617 | 0.0 |       | 1.0               | 0.494 | 0.0   | 64.6 | 29.5 | 68.4              | 74.5 | 66 |  | 1.0 | 0.617                       | 0.0 |  |  |  |       |                   |  |  |              |              |              |
| 79         | 68         | 67         | 1.0              | 0.633 | 0.0 | 72.5 | 14.8 | 77.6                        | 79.0 | 79 |  | 1.0 | 0.509 | 0.0               | 65.4 | 28.0 | 69   |      |                             |  |     |       |     |       |                   |       |       |      |      |                   |      |    |  |     |                             |     |  |  |  |       |                   |  |  |              |              |              |

1-103931-L0

QE170-72

LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*rw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

Output: Offset standard print; separation cmy0\*, D65, page 10/33

TUB-test chart QE17; hue code: H\*d=R50Yd  
48 step hue circles; rgb-LabCh\*tables

input: rgb/cmyk -> rgb<sub>dd</sub>  
output: 3D-linearization to cmy0\*<sub>dd</sub>

1-103931-F0

see similar files: <http://130.149.60.45/~farbmetrik/QE17/QE17L0FA.TXT> /PS  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB registration: 20130201-QE17/QE17L0FA.TXT /PS  
application for measurement of offset print output, separation cmy0\* (CMY0)  
TUB material: code=rha4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<sub>s</sub>:  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;

Six hue angles of the device colours RYGBM<sub>d</sub>:  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours RYGBM<sub>c</sub>:  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| $h_{ab,d}$ | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd361M}$ | $LAB^*_{d361M}$ | $LAB^*_{d361Mi}(x=LabCh)$ | $rgb^*_{ds361Mi}$ | $LAB^*_{ds361Mi}(x=LabCh)$ | $rgb^*_{dd361Mi}$ | $rgb^*_{de361Mi}$ | $LAB^*_{de361Mi}(x=LabCh)$ | $rgb^*_{dd361Mi}$ | $rgb^*_{dd}$ | $rgb^*_{ds}$ | $rgb^*_{de}$ |
|------------|------------|------------|------------------|-----------------|---------------------------|-------------------|----------------------------|-------------------|-------------------|----------------------------|-------------------|--------------|--------------|--------------|
| 86         | 75         | 75         | 1.0              | 0.75            | 0.0                       | 77.9              | 5.4                        | 83.8              | 84.0              | 86                         | 1.0               | 0.75         | 0.0          |              |
| 87         | 76         | 76         | 1.0              | 0.766           | 0.0                       | 78.6              | 4.3                        | 84.7              | 84.8              | 87                         | 1.0               | 0.767        | 0.0          |              |
| 87         | 77         | 77         | 1.0              | 0.783           | 0.0                       | 79.4              | 3.2                        | 85.6              | 85.7              | 87                         | 1.0               | 0.783        | 0.0          |              |
| 88         | 78         | 78         | 1.0              | 0.8             | 0.0                       | 80.1              | 2.0                        | 86.5              | 86.5              | 88                         | 1.0               | 0.8          | 0.0          |              |
| 89         | 79         | 80         | 1.0              | 0.816           | 0.0                       | 80.8              | 0.8                        | 87.3              | 87.3              | 89                         | 1.0               | 0.817        | 0.0          |              |
| 90         | 80         | 81         | 1.0              | 0.833           | 0.0                       | 81.6              | -0.3                       | 88.2              | 88.2              | 90                         | 1.0               | 0.833        | 0.0          |              |
| 91         | 81         | 82         | 1.0              | 0.85            | 0.0                       | 82.3              | -1.5                       | 89.0              | 89.0              | 91                         | 1.0               | 0.85         | 0.0          |              |
| 91         | 82         | 83         | 1.0              | 0.866           | 0.0                       | 83.1              | -2.8                       | 89.8              | 89.8              | 91                         | 1.0               | 0.867        | 0.0          |              |
| 92         | 83         | 84         | 1.0              | 0.883           | 0.0                       | 83.7              | -3.8                       | 90.5              | 90.6              | 92                         | 1.0               | 0.883        | 0.0          |              |
| 92         | 84         | 85         | 1.0              | 0.9             | 0.0                       | 84.3              | -4.7                       | 91.3              | 91.4              | 92                         | 1.0               | 0.9          | 0.0          |              |
| 93         | 85         | 86         | 1.0              | 0.916           | 0.0                       | 84.9              | -5.6                       | 92.0              | 92.2              | 93                         | 1.0               | 0.917        | 0.0          |              |
| 94         | 86         | 87         | 1.0              | 0.933           | 0.0                       | 85.5              | -6.5                       | 92.7              | 92.9              | 94                         | 1.0               | 0.933        | 0.0          |              |
| 94         | 87         | 88         | 1.0              | 0.95            | 0.0                       | 86.0              | -7.4                       | 93.4              | 93.7              | 94                         | 1.0               | 0.95         | 0.0          |              |
| 95         | 88         | 90         | 1.0              | 0.966           | 0.0                       | 86.6              | -8.3                       | 94.1              | 94.5              | 95                         | 1.0               | 0.967        | 0.0          |              |
| 95         | 89         | 91         | 1.0              | 0.983           | 0.0                       | 87.2              | -9.2                       | 94.8              | 95.2              | 95                         | 1.0               | 0.983        | 0.0          |              |
| 96         | 90         | 92         | 1.0              | 1.0             | 0.0                       | 87.8              | -10.2                      | 95.4              | 96.0              | 96                         | 1.0               | 1.0          | 0.0          |              |
| 96         | 91         | 93         | 0.983            | 1.0             | 0.0                       | 87.3              | -10.7                      | 94.6              | 95.2              | 96                         | 1.0               | 0.983        | 1.0          | 0.0          |
| 96         | 92         | 94         | 0.966            | 1.0             | 0.0                       | 86.8              | -11.2                      | 93.8              | 94.5              | 96                         | 1.0               | 0.967        | 1.0          | 0.0          |
| 97         | 93         | 95         | 0.95             | 1.0             | 0.0                       | 86.4              | -11.7                      | 93.0              | 93.7              | 97                         | 1.0               | 0.95         | 1.0          | 0.0          |
| 97         | 94         | 96         | 0.933            | 1.0             | 0.0                       | 85.9              | -12.2                      | 92.2              | 93.0              | 97                         | 1.0               | 0.933        | 1.0          | 0.0          |
| 97         | 95         | 98         | 0.916            | 1.0             | 0.0                       | 85.5              | -12.7                      | 91.3              | 92.2              | 97                         | 1.0               | 0.917        | 1.0          | 0.0          |
| 98         | 96         | 99         | 0.9              | 1.0             | 0.0                       | 85.0              | -13.2                      | 90.5              | 91.5              | 98                         | 1.0               | 0.9          | 1.0          | 0.0          |
| 98         | 97         | 100        | 0.883            | 1.0             | 0.0                       | 84.5              | -13.6                      | 89.7              | 90.7              | 98                         | 1.0               | 0.883        | 1.0          | 0.0          |
| 99         | 98         | 101        | 0.866            | 1.0             | 0.0                       | 84.1              | -14.1                      | 88.9              | 90.0              | 99                         | 1.0               | 0.867        | 1.0          | 0.0          |
| 99         | 99         | 102        | 0.85             | 1.0             | 0.0                       | 83.6              | -14.6                      | 88.1              | 89.3              | 99                         | 1.0               | 0.85         | 1.0          | 0.0          |
| 99         | 100        | 103        | 0.833            | 1.0             | 0.0                       | 83.1              | -15.1                      | 87.4              | 88.7              | 99                         | 1.0               | 0.833        | 1.0          | 0.0          |
| 100        | 101        | 105        | 0.816            | 1.0             | 0.0                       | 82.6              | -15.6                      | 86.6              | 88.0              | 100                        | 1.0               | 0.817        | 1.0          | 0.0          |
| 100        | 102        | 106        | 0.8              | 1.0             | 0.0                       | 82.2              | -16.1                      | 85.8              | 87.3              | 100                        | 1.0               | 0.8          | 1.0          | 0.0          |
| 101        | 103        | 107        | 0.783            | 1.0             | 0.0                       | 81.7              | -16.6                      | 85.1              | 86.7              | 101                        | 1.0               | 0.783        | 1.0          | 0.0          |
| 101        | 104        | 108        | 0.766            | 1.0             | 0.0                       | 81.2              | -17.0                      | 84.3              | 86.0              | 101                        | 1.0               | 0.767        | 1.0          | 0.0          |
| 101        | 105        | 109        | 0.75             | 1.0             | 0.0                       | 80.7              | -17.5                      | 83.5              | 85.3              | 101                        | 1.0               | 0.75         | 1.0          | 0.0          |
| 102        | 106        | 110        | 0.733            | 1.0             | 0.0                       | 80.0              | -18.4                      | 82.5              | 84.6              | 102                        | 1.0               | 0.733        | 1.0          | 0.0          |
| 103        | 107        | 112        | 0.716            | 1.0             | 0.0                       | 79.3              | -19.3                      | 81.5              | 83.8              | 103                        | 1.0               | 0.717        | 1.0          | 0.0          |
| 104        | 108        | 113        | 0.7              | 1.0             | 0.0                       | 78.5              | -20.2                      | 80.5              | 83.0              | 104                        | 1.0               | 0.7          | 1.0          | 0.0          |
| 104        | 109        | 114        | 0.683            | 1.0             | 0.0                       | 77.8              | -21.1                      | 79.4              | 82.2              | 104                        | 1.0               | 0.683        | 1.0          | 0.0          |
| 105        | 110        | 115        | 0.666            | 1.0             | 0.0                       | 77.1              | -22.0                      | 78.4              | 81.4              | 105                        | 1.0               | 0.667        | 1.0          | 0.0          |
| 106        | 111        | 116        | 0.65             | 1.0             | 0.0                       | 76.4              | -22.8                      | 77.3              | 80.6              | 106                        | 1.0               | 0.65         | 1.0          | 0.0          |
| 107        | 112        | 117        | 0.633            | 1.0             | 0.0                       | 75.6              | -23.6                      | 76.2              | 79.8              | 107                        | 1.0               | 0.633        | 1.0          | 0.0          |
| 108        | 113        | 119        | 0.616            | 1.0             | 0.0                       | 75.0              | -24.4                      | 75.1              | 79.0              | 108                        | 1.0               | 0.617        | 1.0          | 0.0          |
| 108        | 114        | 120        | 0.6              | 1.0             | 0.0                       | 74.3              | -25.3                      | 73.9              | 78.1              | 108                        | 1.0               | 0.6          | 1.0          | 0.0          |
| 109        | 115        | 121        | 0.583            | 1.0             | 0.0                       | 73.7              | -26.1                      | 72.7              | 77.2              | 109                        | 1.0               | 0.583        | 1.0          | 0.0          |
| 110        | 116        | 122        | 0.566            | 1.0             | 0.0                       | 73.1              | -26.9                      | 71.4              | 76.3              | 110                        | 1.0               | 0.567        | 1.0          | 0.0          |
| 111        | 117        | 123        | 0.55             | 1.0             | 0.0                       | 72.4              | -27.6                      | 70.2              | 75.5              | 111                        | 1.0               | 0.55         | 1.0          | 0.0          |
| 112        | 118        | 124        | 0.533            | 1.0             | 0.0                       | 71.8              | -28.3                      | 69.0              | 74.6              | 112                        | 1.0               | 0.533        | 1.0          | 0.0          |
| 113        | 119        | 126        | 0.516            | 1.0             | 0.0                       | 71.2              | -29.0                      | 67.7              | 73.7              | 113                        | 1.0               | 0.517        | 1.0          | 0.0          |
| 114        | 120        | 127        | 0.5              | 1.0             | 0.0                       | 70.6              | -29.7                      | 66.5              | 72.8              | 114                        | 1.0               | 0.5          | 1.0          | 0.0          |

1-1031031-L0 QE170-72 LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

Output: Offset standard print; separation cmy0\*, D65, page 11/33

TUB-test chart QE17; hue code: H\*d=R50Yd  
48 step hue circles;  $rgb-LabCh$ \*tables

input:  $rgb/cmyk \rightarrow rgb_{dd}$   
output: 3D-linearization to  $cmy0^*_{dd}$

TUB registration: 20130201-QE17/QE17L0FA.TXT /PS  
application for measurement of offset print output, separation cmy0\* (CMY0)

TUB material: code=rha4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;

Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| $h_{ab,d}$ | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd361M}$ |     |       | $LAB^*_{dd361Mi}(x=LabCh)$ |       |      | $rgb^*_{ds361Mi}$ |     |             | $LAB^*_{dsx361Mi}(x=LabCh)$ |     |      | $rgb^*_{dd361Mi}$ |      |      | $rgb^*_{de361Mi}$ |           |     | $LAB^*_{dex361Mi}(x=LabCh)$ |       |     | $rgb^*_{dd361Mi}$ |      |       | $rgb^*_{dd}$ | $rgb^*_{ds}$ | $rgb^*_{de}$ |           |     |       |  |  |  |
|------------|------------|------------|------------------|-----|-------|----------------------------|-------|------|-------------------|-----|-------------|-----------------------------|-----|------|-------------------|------|------|-------------------|-----------|-----|-----------------------------|-------|-----|-------------------|------|-------|--------------|--------------|--------------|-----------|-----|-------|--|--|--|
| 114        | 120        | 127        | 0.5              | 1.0 | 0.0   | 70.6                       | -29.7 | 66.5 | 72.8              | 114 | 0.399       | 1.0                         | 0.0 | 66.7 | -34.5             | 59.9 | 69.2 | 120               | 0.5       | 1.0 | 0.0                         | 0.322 | 1.0 | 0.0               | 62.6 | -40.8 | 53.8         | 67.6         | 127          | 0.5       | 1.0 | 0.0   |  |  |  |
| 115        | 121        | 128        | 0.483            | 1.0 | 0.0   | 69.9                       | -30.5 | 65.4 | 72.2              | 115 | 0.382       | 1.0                         | 0.0 | 66.0 | -35.2             | 58.8 | 68.6 | 121               | 0.483     | 1.0 | 0.0                         | 0.312 | 1.0 | 0.0               | 62.0 | -41.8 | 52.9         | 67.5         | 128          | 0.483     | 1.0 | 0.0   |  |  |  |
| 116        | 122        | 129        | 0.466            | 1.0 | 0.0   | 69.3                       | -31.4 | 64.3 | 71.6              | 116 | 0.37        | 1.0                         | 0.0 | 65.4 | -36.1             | 57.9 | 68.3 | 122               | 0.467     | 1.0 | 0.0                         | 0.301 | 1.0 | 0.0               | 61.4 | -42.8 | 51.9         | 67.3         | 129          | 0.467     | 1.0 | 0.0   |  |  |  |
| 117        | 123        | 130        | 0.45             | 1.0 | 0.0   | 68.6                       | -32.2 | 63.2 | 71.0              | 117 | 0.361       | 1.0                         | 0.0 | 64.9 | -37.0             | 57.1 | 68.1 | 123               | 0.45      | 1.0 | 0.0                         | 0.291 | 1.0 | 0.0               | 60.8 | -43.8 | 50.9         | 67.2         | 130          | 0.45      | 1.0 | 0.0   |  |  |  |
| 117        | 124        | 131        | 0.433            | 1.0 | 0.0   | 68.0                       | -33.0 | 62.1 | 70.4              | 117 | 0.352       | 1.0                         | 0.0 | 64.4 | -37.9             | 56.4 | 68.0 | 124               | 0.433     | 1.0 | 0.0                         | 0.28  | 1.0 | 0.0               | 60.2 | -44.7 | 49.9         | 67.0         | 131          | 0.433     | 1.0 | 0.0   |  |  |  |
| 118        | 125        | 133        | 0.416            | 1.0 | 0.0   | 67.3                       | -33.8 | 61.0 | 69.8              | 118 | 0.343       | 1.0                         | 0.0 | 63.8 | -38.8             | 55.6 | 67.9 | 125               | 0.417     | 1.0 | 0.0                         | 0.27  | 1.0 | 0.0               | 59.6 | -45.6 | 48.9         | 66.9         | 133          | 0.417     | 1.0 | 0.0   |  |  |  |
| 119        | 126        | 134        | 0.4              | 1.0 | 0.0   | 66.7                       | -34.5 | 59.9 | 69.2              | 119 | 0.334       | 1.0                         | 0.0 | 63.3 | -39.7             | 54.8 | 67.8 | 126               | 0.4       | 1.0 | 0.0                         | 0.259 | 1.0 | 0.0               | 59.0 | -46.5 | 47.8         | 66.8         | 134          | 0.4       | 1.0 | 0.0   |  |  |  |
| 120        | 127        | 135        | 0.383            | 1.0 | 0.0   | 66.0                       | -35.2 | 58.8 | 68.6              | 120 | 0.325       | 1.0                         | 0.0 | 62.8 | -40.6             | 54.0 | 67.6 | 127               | 0.383     | 1.0 | 0.0                         | 0.249 | 1.0 | 0.0               | 58.4 | -47.4 | 46.8         | 66.6         | 135          | 0.383     | 1.0 | 0.0   |  |  |  |
| 122        | 128        | 136        | 0.366            | 1.0 | 0.0   | 65.2                       | -36.4 | 57.6 | 68.2              | 122 | 0.316       | 1.0                         | 0.0 | 62.3 | -41.5             | 53.2 | 67.5 | 128               | 0.367     | 1.0 | 0.0                         | 0.233 | 1.0 | 0.0               | 57.9 | -48.3 | 45.8         | 66.6         | 136          | 0.367     | 1.0 | 0.0   |  |  |  |
| 124        | 129        | 137        | 0.35             | 1.0 | 0.0   | 64.2                       | -38.2 | 56.2 | 67.9              | 124 | 0.307       | 1.0                         | 0.0 | 61.7 | -42.3             | 52.4 | 67.4 | 129               | 0.35      | 1.0 | 0.0                         | 0.217 | 1.0 | 0.0               | 57.4 | -49.2 | 44.7         | 66.6         | 137          | 0.35      | 1.0 | 0.0   |  |  |  |
| 126        | 130        | 138        | 0.333            | 1.0 | 0.0   | 63.2                       | -39.8 | 54.7 | 67.7              | 126 | 0.298       | 1.0                         | 0.0 | 61.2 | -43.1             | 51.5 | 67.3 | 130               | 0.333     | 1.0 | 0.0                         | 0.201 | 1.0 | 0.0               | 57.0 | -50.0 | 43.7         | 66.5         | 138          | 0.333     | 1.0 | 0.0   |  |  |  |
| 127        | 131        | 140        | 0.316            | 1.0 | 0.0   | 62.3                       | -41.4 | 53.2 | 67.5              | 127 | 0.289       | 1.0                         | 0.0 | 60.7 | -44.0             | 50.7 | 67.2 | 131               | 0.317     | 1.0 | 0.0                         | 0.185 | 1.0 | 0.0               | 56.5 | -50.9 | 42.7         | 66.5         | 140          | 0.317     | 1.0 | 0.0   |  |  |  |
| 129        | 132        | 141        | 0.3              | 1.0 | 0.0   | 61.3                       | -43.0 | 51.7 | 67.3              | 129 | 0.28        | 1.0                         | 0.0 | 60.2 | -44.8             | 49.8 | 67.0 | 132               | 0.3       | 1.0 | 0.0                         | 0.169 | 1.0 | 0.0               | 56.0 | -51.7 | 41.6         | 66.5         | 141          | 0.3       | 1.0 | 0.0   |  |  |  |
| 131        | 133        | 142        | 0.283            | 1.0 | 0.0   | 60.3                       | -44.5 | 50.1 | 67.0              | 131 | 0.271       | 1.0                         | 0.0 | 59.6 | -45.5             | 48.9 | 66.9 | 133               | 0.283     | 1.0 | 0.0                         | 0.153 | 1.0 | 0.0               | 55.5 | -52.5 | 40.5         | 66.4         | 142          | 0.283     | 1.0 | 0.0   |  |  |  |
| 133        | 134        | 143        | 0.266            | 1.0 | 0.0   | 59.3                       | -45.9 | 48.5 | 66.8              | 133 | 0.262       | 1.0                         | 0.0 | 59.1 | -46.3             | 48.0 | 66.8 | 134               | 0.267     | 1.0 | 0.0                         | 0.137 | 1.0 | 0.0               | 55.1 | -53.3 | 39.4         | 66.4         | 143          | 0.267     | 1.0 | 0.0   |  |  |  |
| 135        | 135        | 144        | 0.25             | 1.0 | 0.0   | 58.4                       | -47.3 | 46.8 | 66.6              | 135 | 0.253       | 1.0                         | 0.0 | 58.6 | -47.0             | 47.1 | 66.7 | 135               | 0.25      | 1.0 | 0.0                         | 0.122 | 1.0 | 0.0               | 54.6 | -54.2 | 38.4         | 66.5         | 144          | 0.25      | 1.0 | 0.0   |  |  |  |
| 136        | 136        | 145        | 0.233            | 1.0 | 0.0   | 57.9                       | -48.3 | 45.8 | 66.5              | 136 | 0.241       | 1.0                         | 0.0 | 58.1 | -47.8             | 46.3 | 66.6 | 136               | 0.233     | 1.0 | 0.0                         | 0.108 | 1.0 | 0.0               | 54.1 | -55.4 | 37.6         | 67.0         | 145          | 0.233     | 1.0 | 0.0   |  |  |  |
| 137        | 137        | 147        | 0.216            | 1.0 | 0.0   | 57.4                       | -49.2 | 44.7 | 66.5              | 137 | 0.227       | 1.0                         | 0.0 | 57.7 | -48.6             | 45.4 | 66.6 | 137               | 0.217     | 1.0 | 0.0                         | 0.095 | 1.0 | 0.0               | 53.6 | -56.6 | 36.7         | 67.6         | 147          | 0.217     | 1.0 | 0.0   |  |  |  |
| 138        | 138        | 148        | 0.2              | 1.0 | 0.0   | 56.9                       | -50.1 | 43.6 | 66.5              | 138 | 0.213       | 1.0                         | 0.0 | 57.3 | -49.4             | 44.5 | 66.6 | 138               | 0.2       | 1.0 | 0.0                         | 0.082 | 1.0 | 0.0               | 53.1 | -57.8 | 35.8         | 68.1         | 148          | 0.2       | 1.0 | 0.0   |  |  |  |
| 140        | 139        | 149        | 0.183            | 1.0 | 0.0   | 56.4                       | -51.0 | 42.5 | 66.4              | 140 | 0.2         | 1.0                         | 0.0 | 56.9 | -50.1             | 43.6 | 66.5 | 139               | 0.183     | 1.0 | 0.0                         | 0.069 | 1.0 | 0.0               | 52.6 | -59.0 | 34.9         | 68.6         | 149          | 0.183     | 1.0 | 0.0   |  |  |  |
| 141        | 140        | 150        | 0.166            | 1.0 | 0.0   | 55.9                       | -51.9 | 41.4 | 66.4              | 141 | 0.186       | 1.0                         | 0.0 | 56.5 | -50.8             | 42.7 | 66.5 | 140               | 0.167     | 1.0 | 0.0                         | 0.056 | 1.0 | 0.0               | 52.1 | -60.1 | 34.0         | 69.2         | 150          | 0.167     | 1.0 | 0.0   |  |  |  |
| 142        | 141        | 151        | 0.15             | 1.0 | 0.0   | 55.4                       | -52.7 | 40.3 | 66.4              | 142 | 0.172       | 1.0                         | 0.0 | 56.1 | -51.6             | 41.8 | 66.5 | 141               | 0.15      | 1.0 | 0.0                         | 0.043 | 1.0 | 0.0               | 51.7 | -61.3 | 33.0         | 69.7         | 151          | 0.15      | 1.0 | 0.0   |  |  |  |
| 143        | 142        | 152        | 0.133            | 1.0 | 0.0   | 54.9                       | -53.5 | 39.1 | 66.3              | 143 | 0.159       | 1.0                         | 0.0 | 55.7 | -52.3             | 40.9 | 66.4 | 142               | 0.133     | 1.0 | 0.0                         | 0.03  | 1.0 | 0.0               | 51.2 | -62.4 | 32.0         | 70.2         | 152          | 0.133     | 1.0 | 0.0   |  |  |  |
| 145        | 143        | 154        | 0.116            | 1.0 | 0.0   | 54.4                       | -54.7 | 38.0 | 66.6              | 145 | 0.145       | 1.0                         | 0.0 | 55.3 | -52.9             | 40.0 | 66.4 | 143               | 0.117     | 1.0 | 0.0                         | 0.016 | 1.0 | 0.0               | 50.7 | -63.5 | 30.9         | 70.8         | 154          | 0.117     | 1.0 | 0.0   |  |  |  |
| 146        | 144        | 155        | 0.1              | 1.0 | 0.0   | 53.7                       | -56.2 | 37.0 | 67.3              | 146 | 0.131       | 1.0                         | 0.0 | 54.9 | -53.6             | 39.0 | 66.4 | 144               | 0.1       | 1.0 | 0.0                         | 0.003 | 1.0 | 0.0               | 50.2 | -64.6 | 29.9         | 71.3         | 155          | 0.1       | 1.0 | 0.0   |  |  |  |
| 148        | 145        | 156        | 0.083            | 1.0 | 0.0   | 53.1                       | -57.7 | 35.9 | 68.0              | 148 | 0.119       | 1.0                         | 0.0 | 54.5 | -54.5             | 38.2 | 66.6 | 145               | 0.083     | 1.0 | 0.0                         | 0.0   | 1.0 | 0.021             | 50.1 | -64.6 | 28.3         | 70.6         | 156          | 0.083     | 1.0 | 0.0   |  |  |  |
| 149        | 146        | 157        | 0.066            | 1.0 | 0.0   | 52.5                       | -59.2 | 34.7 | 68.7              | 149 | 0.107       | 1.0                         | 0.0 | 54.1 | -55.5             | 37.5 | 67.1 | 146               | 0.067     | 1.0 | 0.0                         | 0.0   | 1.0 | 0.049             | 50.3 | -64.2 | 26.5         | 69.5         | 157          | 0.067     | 1.0 | 0.0   |  |  |  |
| 151        | 147        | 158        | 0.049            | 1.0 | 0.0   | 51.9                       | -60.7 | 33.5 | 69.4              | 151 | 0.096       | 1.0                         | 0.0 | 53.7 | -56.5             | 36.8 | 67.5 | 147               | 0.05      | 1.0 | 0.0                         | 0.0   | 1.0 | 0.077             | 50.4 | -63.7 | 24.8         | 68.4         | 158          | 0.05      | 1.0 | 0.0   |  |  |  |
| 152        | 148        | 159        | 0.033            | 1.0 | 0.0   | 51.3                       | -62.2 | 32.2 | 70.0              | 152 | 0.085       | 1.0                         | 0.0 | 53.2 | -57.6             | 36.0 | 68.0 | 148               | 0.033     | 1.0 | 0.0                         | 0.0   | 1.0 | 0.104             | 50.5 | -63.1 | 23.1         | 67.3         | 159          | 0.033     | 1.0 | 0.0   |  |  |  |
| 154        | 149        | 161        | 0.016            | 1.0 | 0.0   | 50.6                       | -63.6 | 30.9 | 70.7              | 154 | 0.074       | 1.0                         | 0.0 | 52.8 | -58.6             | 35.3 | 68.4 | 149               | 0.017     | 1.0 | 0.0                         | 0.0   | 1.0 | 0.13              | 50.6 | -62.6 | 21.5         | 66.3         | 161          | 0.017     | 1.0 | 0.0   |  |  |  |
| 155        | 150        | 162        | 0.0              | 1.0 | 0.0   | 50.0                       | -65.0 | 29.6 | 71.4              | 155 | $G_d$ 0.062 | 1.0                         | 0.0 | 52.4 | -59.6             | 34.5 | 68.9 | 150               | $G_s$ 0.0 | 1.0 | 0.0                         | 0.0   | 1.0 | 0.151             | 50.7 | -62.0 | 19.9         | 65.2         | 162          | $G_e$ 0.0 | 1.0 | 0.0   |  |  |  |
| 156        | 151        | 163        | 0.0              | 1.0 | 0.016 | 50.1                       | -64.7 | 28.5 | 70.7              | 156 | 0.051       | 1.0                         | 0.0 | 52.0 | -60.6             | 33.6 | 69.4 | 151               | 0.0       | 1.0 | 0.017                       | 0.0   | 1.0 | 0.167             | 50.8 | -61.6 | 18.7         | 64.4         | 163          | 0.0       | 1.0 | 0.017 |  |  |  |
| 156        | 152        | 164        | 0.0              | 1.0 | 0.033 | 50.1                       | -64.5 | 27.4 | 70.1              | 156 | 0.04        | 1.0                         | 0.0 | 51.5 | -61.6             | 32.8 | 69.8 | 152               | 0.0       | 1.0 | 0.033                       | 0.0   | 1.0 | 0.183             | 50.9 | -61.1 | 17.5         | 63.6         | 164          | 0.0       | 1.0 | 0.033 |  |  |  |
| 157        | 153        | 164        | 0.0              | 1.0 | 0.05  | 50.2                       | -64.2 | 26.4 | 69.6              |     |             |                             |     |      |                   |      |      |                   |           |     |                             |       |     |                   |      |       |              |              |              |           |     |       |  |  |  |

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours RYGBM<sub>s</sub>:  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;

Six hue angles of the device colours RYGBM<sub>d</sub>:  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours RYGBM<sub>e</sub>:  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| $h_{ab,d}$ | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd361M}$ | $LAB^*_{dsx361Mi}$ (x=LabCh) | $rgb^*_{ds361Mi}$ | $LAB^*_{dsx361Mi}$ (x=LabCh) | $rgb^*_{dd361Mi}$ | $rgb^*_{de361Mi}$ | $LAB^*_{dex361Mi}$ (x=LabCh) | $rgb^*_{dd361Mi}$ | $rgb^*_{dd361Mi}$ | $rgb^*_{dd}$ | $rgb^*_{ds}$ | $rgb^*_{de}$ |
|------------|------------|------------|------------------|------------------------------|-------------------|------------------------------|-------------------|-------------------|------------------------------|-------------------|-------------------|--------------|--------------|--------------|
| 167        | 165        | 175        | 0.0              | 1.0                          | 0.25              | 51.2                         | -58.9 12.7        | 60.3              | 167                          | 0.0               | 1.0               | 0.25         | 51.2         | -58.9 12.7   |
| 168        | 166        | 176        | 0.0              | 1.0                          | 0.266             | 51.3                         | -58.4 11.3        | 59.5              | 168                          | 0.0               | 1.0               | 0.267        | 51.3         | -58.4 11.3   |
| 170        | 167        | 177        | 0.0              | 1.0                          | 0.283             | 51.4                         | -57.9 10.0        | 58.8              | 170                          | 0.0               | 1.0               | 0.283        | 51.4         | -57.9 10.0   |
| 171        | 168        | 178        | 0.0              | 1.0                          | 0.3               | 51.5                         | -57.3 8.7         | 58.0              | 171                          | 0.0               | 1.0               | 0.3          | 51.5         | -57.3 8.7    |
| 172        | 169        | 179        | 0.0              | 1.0                          | 0.316             | 51.6                         | -56.8 7.4         | 57.3              | 172                          | 0.0               | 1.0               | 0.317        | 51.6         | -56.8 7.4    |
| 173        | 170        | 180        | 0.0              | 1.0                          | 0.333             | 51.7                         | -56.2 6.1         | 56.5              | 173                          | 0.0               | 1.0               | 0.333        | 51.7         | -56.2 6.1    |
| 174        | 171        | 181        | 0.0              | 1.0                          | 0.35              | 51.8                         | -55.5 4.9         | 55.8              | 174                          | 0.0               | 1.0               | 0.35         | 51.8         | -55.5 4.9    |
| 176        | 172        | 182        | 0.0              | 1.0                          | 0.366             | 51.9                         | -54.9 3.7         | 55.0              | 176                          | 0.0               | 1.0               | 0.367        | 51.9         | -54.9 3.7    |
| 177        | 173        | 183        | 0.0              | 1.0                          | 0.383             | 52.0                         | -54.2 2.3         | 54.3              | 177                          | 0.0               | 1.0               | 0.383        | 52.0         | -54.2 2.3    |
| 179        | 174        | 184        | 0.0              | 1.0                          | 0.4               | 52.2                         | -53.6 0.7         | 53.6              | 179                          | 0.0               | 1.0               | 0.4          | 52.2         | -53.6 0.7    |
| 180        | 175        | 185        | 0.0              | 1.0                          | 0.416             | 52.3                         | -52.8 -0.8        | 52.9              | 180                          | 0.0               | 1.0               | 0.417        | 52.3         | -52.8 -0.8   |
| 182        | 176        | 185        | 0.0              | 1.0                          | 0.433             | 52.4                         | -52.1 -2.3        | 52.1              | 182                          | 0.0               | 1.0               | 0.433        | 52.4         | -52.1 -2.3   |
| 184        | 177        | 186        | 0.0              | 1.0                          | 0.45              | 52.6                         | -51.3 -3.8        | 51.4              | 184                          | 0.0               | 1.0               | 0.45         | 52.6         | -51.3 -3.8   |
| 185        | 178        | 187        | 0.0              | 1.0                          | 0.466             | 52.7                         | -50.4 -5.3        | 50.7              | 185                          | 0.0               | 1.0               | 0.467        | 52.7         | -50.4 -5.3   |
| 187        | 179        | 188        | 0.0              | 1.0                          | 0.483             | 52.8                         | -49.6 -6.6        | 50.0              | 187                          | 0.0               | 1.0               | 0.483        | 52.8         | -49.6 -6.6   |
| 189        | 180        | 189        | 0.0              | 1.0                          | 0.5               | 52.9                         | -48.6 -8.0        | 49.3              | 189                          | 0.0               | 1.0               | 0.5          | 52.9         | -48.6 -8.0   |
| 191        | 181        | 190        | 0.0              | 1.0                          | 0.516             | 53.1                         | -47.9 -9.5        | 48.9              | 191                          | 0.0               | 1.0               | 0.517        | 53.1         | -47.9 -9.5   |
| 193        | 182        | 191        | 0.0              | 1.0                          | 0.533             | 53.2                         | -47.2 -10.9       | 48.4              | 193                          | 0.0               | 1.0               | 0.533        | 53.2         | -47.2 -10.9  |
| 194        | 183        | 192        | 0.0              | 1.0                          | 0.55              | 53.4                         | -46.4 -12.3       | 48.0              | 194                          | 0.0               | 1.0               | 0.55         | 53.4         | -46.4 -12.3  |
| 196        | 184        | 193        | 0.0              | 1.0                          | 0.566             | 53.5                         | -45.6 -13.7       | 47.6              | 196                          | 0.0               | 1.0               | 0.567        | 53.5         | -45.6 -13.7  |
| 198        | 185        | 194        | 0.0              | 1.0                          | 0.583             | 53.6                         | -44.7 -15.0       | 47.1              | 198                          | 0.0               | 1.0               | 0.583        | 53.6         | -44.7 -15.0  |
| 200        | 186        | 195        | 0.0              | 1.0                          | 0.6               | 53.8                         | -43.8 -16.3       | 46.7              | 200                          | 0.0               | 1.0               | 0.6          | 53.8         | -43.8 -16.3  |
| 202        | 187        | 195        | 0.0              | 1.0                          | 0.616             | 53.9                         | -42.8 -17.5       | 46.3              | 202                          | 0.0               | 1.0               | 0.617        | 53.9         | -42.8 -17.5  |
| 204        | 188        | 196        | 0.0              | 1.0                          | 0.633             | 54.1                         | -42.0 -18.8       | 46.0              | 204                          | 0.0               | 1.0               | 0.633        | 54.1         | -42.0 -18.8  |
| 206        | 189        | 197        | 0.0              | 1.0                          | 0.65              | 54.2                         | -41.2 -20.1       | 45.9              | 206                          | 0.0               | 1.0               | 0.65         | 54.2         | -41.2 -20.1  |
| 207        | 190        | 198        | 0.0              | 1.0                          | 0.666             | 54.3                         | -40.5 -21.4       | 45.8              | 207                          | 0.0               | 1.0               | 0.667        | 54.3         | -40.5 -21.4  |
| 209        | 191        | 199        | 0.0              | 1.0                          | 0.683             | 54.5                         | -39.7 -22.7       | 45.7              | 209                          | 0.0               | 1.0               | 0.683        | 54.5         | -39.7 -22.7  |
| 211        | 192        | 200        | 0.0              | 1.0                          | 0.7               | 54.6                         | -38.8 -23.9       | 45.6              | 211                          | 0.0               | 1.0               | 0.7          | 54.6         | -38.8 -23.9  |
| 213        | 193        | 201        | 0.0              | 1.0                          | 0.716             | 54.7                         | -37.9 -25.1       | 45.5              | 213                          | 0.0               | 1.0               | 0.717        | 54.7         | -37.9 -25.1  |
| 215        | 194        | 202        | 0.0              | 1.0                          | 0.733             | 54.9                         | -37.0 -26.3       | 45.4              | 215                          | 0.0               | 1.0               | 0.733        | 54.9         | -37.0 -26.3  |
| 217        | 195        | 203        | 0.0              | 1.0                          | 0.75              | 55.0                         | -36.0 -27.4       | 45.3              | 217                          | 0.0               | 1.0               | 0.75         | 55.0         | -36.0 -27.4  |
| 218        | 196        | 204        | 0.0              | 1.0                          | 0.766             | 55.1                         | -35.4 -28.4       | 45.4              | 218                          | 0.0               | 1.0               | 0.767        | 55.1         | -35.4 -28.4  |
| 220        | 197        | 205        | 0.0              | 1.0                          | 0.783             | 55.2                         | -34.7 -29.4       | 45.5              | 220                          | 0.0               | 1.0               | 0.783        | 55.2         | -34.7 -29.4  |
| 221        | 198        | 206        | 0.0              | 1.0                          | 0.8               | 55.3                         | -34.0 -30.3       | 45.6              | 221                          | 0.0               | 1.0               | 0.8          | 55.3         | -34.0 -30.3  |
| 223        | 199        | 206        | 0.0              | 1.0                          | 0.816             | 55.4                         | -33.3 -31.3       | 45.7              | 223                          | 0.0               | 1.0               | 0.817        | 55.4         | -33.3 -31.3  |
| 224        | 200        | 207        | 0.0              | 1.0                          | 0.833             | 55.6                         | -32.6 -32.2       | 45.9              | 224                          | 0.0               | 1.0               | 0.833        | 55.6         | -32.6 -32.2  |
| 226        | 201        | 208        | 0.0              | 1.0                          | 0.85              | 55.7                         | -31.8 -33.1       | 46.0              | 226                          | 0.0               | 1.0               | 0.85         | 55.7         | -31.8 -33.1  |
| 227        | 202        | 209        | 0.0              | 1.0                          | 0.866             | 55.8                         | -31.1 -34.0       | 46.1              | 227                          | 0.0               | 1.0               | 0.867        | 55.8         | -31.1 -34.0  |
| 229        | 203        | 210        | 0.0              | 1.0                          | 0.883             | 55.9                         | -30.4 -35.0       | 46.3              | 229                          | 0.0               | 1.0               | 0.883        | 55.9         | -30.4 -35.0  |
| 230        | 204        | 211        | 0.0              | 1.0                          | 0.9               | 56.0                         | -29.7 -35.9       | 46.7              | 230                          | 0.0               | 1.0               | 0.9          | 56.0         | -29.7 -35.9  |
| 231        | 205        | 212        | 0.0              | 1.0                          | 0.916             | 56.1                         | -29.1 -36.9       | 47.0              | 231                          | 0.0               | 1.0               | 0.917        | 56.1         | -29.1 -36.9  |
| 233        | 206        | 213        | 0.0              | 1.0                          | 0.933             | 56.3                         | -28.4 -37.8       | 47.3              | 233                          | 0.0               | 1.0               | 0.933        | 56.3         | -28.4 -37.8  |
| 234        | 207        | 214        | 0.0              | 1.0                          | 0.95              | 56.4                         | -27.7 -38.8       | 47.7              | 234                          | 0.0               | 1.0               | 0.95         | 56.4         | -27.7 -38.8  |
| 235        | 208        | 215        | 0.0              | 1.0                          | 0.966             | 56.5                         | -27.0 -39.7       | 48.0              | 235                          | 0.0               | 1.0               | 0.967        | 56.5         | -27.0 -39.7  |
| 237        | 209        | 216        | 0.0              | 1.0                          | 0.983             | 56.6                         | -26.2 -40.6       | 48.3              | 237                          | 0.0               | 1.0               | 0.983        | 56.6         | -26.2 -40.6  |
| 238        | 210        | 216        | 0.0              | 1.0                          | 1.0               | 56.8                         | -25.5 -41.5       | 48.7              | 238                          | 0.0               | 1.0               | 1.0          | 56.8         | -25.5 -41.5  |

1-1031231-L0 QE170-72 LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

Output: Offset standard print; separation cmy0\*, D65, page 13/33

TUB-test chart QE17; hue code:  $H^*_d=R50Y_d$   
48 step hue circles;  $rgb-LabCh^*$  tables

input:  $rgb/cmyk \rightarrow rgb_{dd}$   
output: 3D-linearization to  $cmy0^*_{dd}$

TUB registration: 20130201-QE17/QE17L0FA.TXT /PS  
application for measurement of offset print output, separation cmy0\* (CMY0)  
TUB material: code=rha4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| Colorimetric data of the three colours (C <sub>d</sub> , C <sub>s</sub> , C <sub>e</sub> ) and the elementary colorimetric data (C <sub>d</sub> , C <sub>s</sub> , C <sub>e</sub> ) |                   |                   |                         |                                    |                |                         |                                    |                |                         | Colorimetric data of the three colours (C <sub>d</sub> , C <sub>s</sub> , C <sub>e</sub> ) and the elementary colorimetric data (C <sub>d</sub> , C <sub>s</sub> , C <sub>e</sub> ) |                |                         |                                    |                |                         |                                    |                |                         |                                    | Colorimetric data of the three colours (C <sub>d</sub> , C <sub>s</sub> , C <sub>e</sub> ) and the elementary colorimetric data (C <sub>d</sub> , C <sub>s</sub> , C <sub>e</sub> ) |                         |                                    |                |                         |                                    |                |                         |                                    |                | Colorimetric data of the three colours (C <sub>d</sub> , C <sub>s</sub> , C <sub>e</sub> ) and the elementary colorimetric data (C <sub>d</sub> , C <sub>s</sub> , C <sub>e</sub> ) |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |                         |                                    |                |      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|-------------------------|------------------------------------|----------------|------|
| h <sub>ab,d</sub>                                                                                                                                                                   | h <sub>ab,s</sub> | h <sub>ab,e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh)                                                                                                                                                  | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub>                                                                                                                                                                      | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub>                                                                                                                                                             | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* <sub>ds361Mi</sub> | LAB* <sub>dsx361Mi</sub> (x=LabCh) | C <sub>s</sub> | rgb* <sub>de361Mi</sub> | LAB* <sub>dex361Mi</sub> (x=LabCh) | C <sub>e</sub> | rgb* <sub>dd361Mi</sub> | LAB* <sub>ddx361Mi</sub> (x=LabCh) | C <sub>d</sub> | rgb* |

1-1031331-L0 QE170-72 LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

Output: Offset standard print; separation cmy0\*, D65, page 14/33

TUB-test chart QE17; hue code:  $H^*_d=R50Y_d$   
48 step hue circles;  $rgb-LabCh$ \*tables

input:  $rgb/cmyk \rightarrow rgb_{dd}$   
output: 3D-linearization to  $cmy0^*_{dd}$

TUB registration: 20130201-QE17/QE17L0FA.TXT /PS  
application for measurement of offset print output, separation cmy0\* (CMY0)  
TUB material: code=rha4ta

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| Six hue angles of the device colours RYGBM <sub>d</sub> : $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; |            |            |                  |                             |                   |                             |                   |                   |                              | Six hue angles of the elementary colours RYGBM <sub>e</sub> : $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.8$ |                   |                   |       |      |       |       |       |      |          |       |     |     |       |       |      |      |       |       |      |          |       |     |     |
|-----------------------------------------------------------------------------------------------------------------|------------|------------|------------------|-----------------------------|-------------------|-----------------------------|-------------------|-------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------|------|-------|-------|-------|------|----------|-------|-----|-----|-------|-------|------|------|-------|-------|------|----------|-------|-----|-----|
| $h_{ab,d}$                                                                                                      | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd361M}$ | $LAB^*_{dd361Mi} (x=LabCh)$ | $rgb^*_{ds361Mi}$ | $LAB^*_{ds361Mi} (x=LabCh)$ | $rgb^*_{dd361Mi}$ | $rgb^*_{de361Mi}$ | $LAB^*_{dex361Mi} (x=LabCh)$ | $rgb^*_{dd361Mi}$                                                                                                 | $rgb^*_{ds361Mi}$ | $rgb^*_{de361Mi}$ |       |      |       |       |       |      |          |       |     |     |       |       |      |      |       |       |      |          |       |     |     |
| 289                                                                                                             | 255        | 258        | 0.0              | 0.25                        | 1.0               | 32.8                        | 14.3              | -40.2             | 42.7                         | 289                                                                                                               | 0.0               | 0.657             | 1.0   | 47.5 | -10.9 | -40.9 | 42.5  | 255  | 0.0      | 0.25  | 1.0 | 0.0 | 0.613 | 1.0   | 46.1 | -8.6 | -40.8 | 41.9  | 258  | 0.0      | 0.25  | 1.0 |     |
| 290                                                                                                             | 256        | 258        | 0.0              | 0.233                       | 1.0               | 32.2                        | 15.3              | -40.3             | 43.1                         | 290                                                                                                               | 0.0               | 0.641             | 1.0   | 47.0 | -10.1 | -40.9 | 42.2  | 256  | 0.0      | 0.233 | 1.0 | 0.0 | 0.603 | 1.0   | 45.7 | -7.9 | -40.9 | 41.7  | 258  | 0.0      | 0.233 | 1.0 |     |
| 292                                                                                                             | 257        | 259        | 0.0              | 0.216                       | 1.0               | 31.7                        | 16.4              | -40.3             | 43.6                         | 292                                                                                                               | 0.0               | 0.624             | 1.0   | 46.5 | -9.3  | -40.8 | 42.0  | 257  | 0.0      | 0.217 | 1.0 | 0.0 | 0.593 | 1.0   | 45.3 | -7.2 | -40.9 | 41.6  | 259  | 0.0      | 0.217 | 1.0 |     |
| 293                                                                                                             | 258        | 260        | 0.0              | 0.2                         | 1.0               | 31.1                        | 17.5              | -40.4             | 44.0                         | 293                                                                                                               | 0.0               | 0.613             | 1.0   | 46.1 | -8.6  | -40.8 | 41.9  | 258  | 0.0      | 0.2   | 1.0 | 0.0 | 0.583 | 1.0   | 44.9 | -6.6 | -40.9 | 41.5  | 260  | 0.0      | 0.2   | 1.0 |     |
| 294                                                                                                             | 259        | 261        | 0.0              | 0.183                       | 1.0               | 30.6                        | 18.5              | -40.4             | 44.5                         | 294                                                                                                               | 0.0               | 0.602             | 1.0   | 45.7 | -7.9  | -40.9 | 41.7  | 259  | 0.0      | 0.183 | 1.0 | 0.0 | 0.573 | 1.0   | 44.5 | -5.9 | -40.9 | 41.4  | 261  | 0.0      | 0.183 | 1.0 |     |
| 295                                                                                                             | 260        | 262        | 0.0              | 0.166                       | 1.0               | 30.0                        | 19.6              | -40.4             | 44.9                         | 295                                                                                                               | 0.0               | 0.591             | 1.0   | 45.3 | -7.1  | -40.9 | 41.6  | 260  | 0.0      | 0.167 | 1.0 | 0.0 | 0.562 | 1.0   | 44.1 | -5.2 | -40.9 | 41.3  | 262  | 0.0      | 0.167 | 1.0 |     |
| 297                                                                                                             | 261        | 263        | 0.0              | 0.15                        | 1.0               | 29.5                        | 20.7              | -40.4             | 45.4                         | 297                                                                                                               | 0.0               | 0.58              | 1.0   | 44.8 | -6.4  | -40.9 | 41.5  | 261  | 0.0      | 0.15  | 1.0 | 0.0 | 0.552 | 1.0   | 43.7 | -4.5 | -40.9 | 41.2  | 263  | 0.0      | 0.15  | 1.0 |     |
| 298                                                                                                             | 262        | 264        | 0.0              | 0.133                       | 1.0               | 28.9                        | 21.8              | -40.3             | 45.8                         | 298                                                                                                               | 0.0               | 0.569             | 1.0   | 44.4 | -5.7  | -40.9 | 41.4  | 262  | 0.0      | 0.133 | 1.0 | 0.0 | 0.542 | 1.0   | 43.4 | -3.9 | -40.8 | 41.1  | 264  | 0.0      | 0.133 | 1.0 |     |
| 299                                                                                                             | 263        | 265        | 0.0              | 0.116                       | 1.0               | 28.4                        | 22.8              | -40.3             | 46.3                         | 299                                                                                                               | 0.0               | 0.558             | 1.0   | 44.0 | -4.9  | -40.9 | 41.3  | 263  | 0.0      | 0.117 | 1.0 | 0.0 | 0.532 | 1.0   | 43.0 | -3.2 | -40.8 | 41.0  | 265  | 0.0      | 0.117 | 1.0 |     |
| 300                                                                                                             | 264        | 266        | 0.0              | 0.1                         | 1.0               | 27.9                        | 23.8              | -40.4             | 46.9                         | 300                                                                                                               | 0.0               | 0.547             | 1.0   | 43.5 | -4.2  | -40.8 | 41.2  | 264  | 0.0      | 0.1   | 1.0 | 0.0 | 0.522 | 1.0   | 42.6 | -2.6 | -40.7 | 40.9  | 266  | 0.0      | 0.1   | 1.0 |     |
| 301                                                                                                             | 265        | 267        | 0.0              | 0.083                       | 1.0               | 27.4                        | 24.7              | -40.4             | 47.4                         | 301                                                                                                               | 0.0               | 0.536             | 1.0   | 43.1 | -3.5  | -40.8 | 41.1  | 265  | 0.0      | 0.083 | 1.0 | 0.0 | 0.512 | 1.0   | 42.2 | -1.9 | -40.7 | 40.8  | 267  | 0.0      | 0.083 | 1.0 |     |
| 302                                                                                                             | 266        | 268        | 0.0              | 0.066                       | 1.0               | 26.9                        | 25.7              | -40.4             | 47.9                         | 302                                                                                                               | 0.0               | 0.525             | 1.0   | 42.7 | -2.8  | -40.7 | 40.9  | 266  | 0.0      | 0.067 | 1.0 | 0.0 | 0.502 | 1.0   | 41.8 | -1.3 | -40.6 | 40.7  | 268  | 0.0      | 0.067 | 1.0 |     |
| 303                                                                                                             | 267        | 269        | 0.0              | 0.049                       | 1.0               | 26.5                        | 26.6              | -40.5             | 48.4                         | 303                                                                                                               | 0.0               | 0.514             | 1.0   | 42.3 | -2.0  | -40.7 | 40.8  | 267  | 0.0      | 0.05  | 1.0 | 0.0 | 0.491 | 1.0   | 41.4 | -0.6 | -40.6 | 40.7  | 269  | 0.0      | 0.05  | 1.0 |     |
| 304                                                                                                             | 268        | 269        | 0.0              | 0.033                       | 1.0               | 26.0                        | 27.6              | -40.4             | 49.0                         | 304                                                                                                               | 0.0               | 0.503             | 1.0   | 41.8 | -1.3  | -40.6 | 40.7  | 268  | 0.0      | 0.033 | 1.0 | 0.0 | 0.48  | 1.0   | 41.0 | 0.0  | -40.6 | 40.7  | 269  | 0.0      | 0.033 | 1.0 |     |
| 305                                                                                                             | 269        | 270        | 0.0              | 0.016                       | 1.0               | 25.5                        | 28.6              | -40.4             | 49.5                         | 305                                                                                                               | 0.0               | 0.491             | 1.0   | 41.4 | -0.6  | -40.6 | 40.7  | 269  | 0.0      | 0.017 | 1.0 | 0.0 | 0.469 | 1.0   | 40.6 | 0.6  | -40.6 | 40.7  | 270  | 0.0      | 0.017 | 1.0 |     |
| 306                                                                                                             | 270        | 271        | 0.0              | 0.0                         | 1.0               | 25.0                        | 29.5              | -40.4             | 50.0                         | 306                                                                                                               | $B_d$             | 0.0               | 0.479 | 1.0  | 41.0  | 0.0   | -40.6 | 40.7 | $270B_s$ | 0.0   | 0.0 | 1.0 | 0.0   | 0.458 | 1.0  | 40.3 | 1.2   | -40.6 | 40.7 | $271B_e$ | 0.0   | 0.0 | 1.0 |
| 307                                                                                                             | 271        | 272        | 0.016            | 0.0                         | 1.0               | 25.4                        | 30.4              | -39.9             | 50.2                         | 307                                                                                                               | 0.0               | 0.467             | 1.0   | 40.6 | 0.7   | -40.6 | 40.7  | 271  | 0.017    | 0.0   | 1.0 | 0.0 | 0.447 | 1.0   | 39.9 | 1.9  | -40.5 | 40.7  | 272  | 0.017    | 0.0   | 1.0 |     |
| 308                                                                                                             | 272        | 273        | 0.033            | 0.0                         | 1.0               | 25.8                        | 31.3              | -39.4             | 50.4                         | 308                                                                                                               | 0.0               | 0.455             | 1.0   | 40.2 | 1.4   | -40.6 | 40.7  | 272  | 0.033    | 0.0   | 1.0 | 0.0 | 0.435 | 1.0   | 39.5 | 2.6  | -40.5 | 40.7  | 273  | 0.033    | 0.0   | 1.0 |     |
| 309                                                                                                             | 273        | 274        | 0.05             | 0.0                         | 1.0               | 26.2                        | 32.2              | -38.9             | 50.5                         | 309                                                                                                               | 0.0               | 0.443             | 1.0   | 39.7 | 2.1   | -40.5 | 40.7  | 273  | 0.05     | 0.0   | 1.0 | 0.0 | 0.424 | 1.0   | 39.1 | 3.3  | -40.5 | 40.7  | 274  | 0.05     | 0.0   | 1.0 |     |
| 310                                                                                                             | 274        | 275        | 0.066            | 0.0                         | 1.0               | 26.5                        | 33.1              | -38.4             | 50.7                         | 310                                                                                                               | 0.0               | 0.431             | 1.0   | 39.3 | 2.8   | -40.5 | 40.7  | 274  | 0.067    | 0.0   | 1.0 | 0.0 | 0.413 | 1.0   | 38.7 | 3.9  | -40.4 | 40.7  | 275  | 0.067    | 0.0   | 1.0 |     |
| 311                                                                                                             | 275        | 276        | 0.083            | 0.0                         | 1.0               | 26.9                        | 33.9              | -37.8             | 50.8                         | 311                                                                                                               | 0.0               | 0.419             | 1.0   | 38.9 | 3.5   | -40.4 | 40.7  | 275  | 0.083    | 0.0   | 1.0 | 0.0 | 0.401 | 1.0   | 38.3 | 4.6  | -40.3 | 40.7  | 276  | 0.083    | 0.0   | 1.0 |     |
| 313                                                                                                             | 276        | 277        | 0.1              | 0.0                         | 1.0               | 27.3                        | 34.8              | -37.3             | 51.0                         | 313                                                                                                               | 0.0               | 0.407             | 1.0   | 38.5 | 4.3   | -40.4 | 40.7  | 276  | 0.1      | 0.0   | 1.0 | 0.0 | 0.39  | 1.0   | 37.9 | 5.3  | -40.3 | 40.7  | 277  | 0.1      | 0.0   | 1.0 |     |
| 314                                                                                                             | 277        | 278        | 0.116            | 0.0                         | 1.0               | 27.7                        | 35.6              | -36.7             | 51.1                         | 314                                                                                                               | 0.0               | 0.395             | 1.0   | 38.1 | 5.0   | -40.3 | 40.7  | 277  | 0.117    | 0.0   | 1.0 | 0.0 | 0.378 | 1.0   | 37.5 | 5.9  | -40.2 | 40.7  | 278  | 0.117    | 0.0   | 1.0 |     |
| 315                                                                                                             | 278        | 279        | 0.133            | 0.0                         | 1.0               | 27.9                        | 36.4              | -36.2             | 51.3                         | 315                                                                                                               | 0.0               | 0.383             | 1.0   | 37.6 | 5.7   | -40.2 | 40.7  | 278  | 0.133    | 0.0   | 1.0 | 0.0 | 0.367 | 1.0   | 37.1 | 6.6  | -40.2 | 40.8  | 279  | 0.133    | 0.0   | 1.0 |     |
| 316                                                                                                             | 279        | 280        | 0.15             | 0.0                         | 1.0               | 28.1                        | 37.2              | -35.7             | 51.6                         | 316                                                                                                               | 0.0               | 0.371             | 1.0   | 37.2 | 6.4   | -40.2 | 40.8  | 279  | 0.15     | 0.0   | 1.0 | 0.0 | 0.357 | 1.0   | 36.7 | 7.3  | -40.2 | 41.0  | 280  | 0.15     | 0.0   | 1.0 |     |
| 317                                                                                                             | 280        | 281        | 0.166            | 0.0                         | 1.0               | 28.2                        | 38.0              | -35.2             | 51.9                         | 317                                                                                                               | 0.0               | 0.36              | 1.0   | 36.8 | 7.1   | -40.2 | 41.0  | 280  | 0.167    | 0.0   | 1.0 | 0.0 | 0.346 | 1.0   | 36.3 | 8.0  | -40.3 | 41.2  | 281  | 0.167    | 0.0   | 1.0 |     |
| 318                                                                                                             | 281        | 282        | 0.183            | 0.0                         | 1.0               | 28.3                        | 38.8              | -34.7             | 52.1                         | 318                                                                                                               | 0.0               | 0.348             | 1.0   | 36.4 | 7.8   | -40.3 | 41.1  | 281  | 0.183    | 0.0   | 1.0 | 0.0 | 0.335 | 1.0   | 35.9 | 8.7  | -40.3 | 41.3  | 282  | 0.183    | 0.0   | 1.0 |     |
| 319                                                                                                             | 282        | 283        | 0.2              | 0.0                         | 1.0               | 28.5                        | 39.6              | -34.2             | 52.4                         | 319                                                                                                               | 0.0               | 0.337             | 1.0   | 36.0 | 8.6   | -40.3 | 41.3  | 282  | 0.2      | 0.0   | 1.0 | 0.0 | 0.324 | 1.0   | 35.5 | 9.4  | -40.3 | 41.5  | 283  | 0.2      | 0.0   | 1.0 |     |
| 320                                                                                                             | 283        | 284        | 0.216            | 0.0                         | 1.0               | 28.6                        | 40.4              | -33.7             | 52.6                         | 320                                                                                                               | 0.0               | 0.326             | 1.0   | 35.6 | 9.3   | -40.3 | 41.5  | 283  | 0.217    | 0.0   | 1.0 | 0.0 | 0.313 | 1.0   | 35.1 | 10.1 | -40.3 | 41.7  | 284  | 0.217    | 0.0   | 1.0 |     |
| 321                                                                                                             | 284        | 285        | 0.233            | 0.0                         | 1.0               | 28.7                        | 41.2              | -33.1             | 52.9                         | 321                                                                                                               | 0.0               | 0.314             | 1.0   | 35.2 | 10.1  | -40.3 | 41.7  | 284  | 0.233    | 0.0   | 1.0 | 0.0 | 0.303 | 1.0   | 34.8 | 10.8 | -40.3 | 41.9  | 285  | 0.233    | 0.0   | 1.0 |     |
| 322                                                                                                             | 285        | 285        | 0.25             | 0.0                         | 1.0               | 28.8                        | 41.9              | -32.5             | 53.1                         | 322                                                                                                               | 0.0               | 0.303             | 1.0   | 34.8 | 10.8  | -40.3 | 41.9  | 285  | 0.25     | 0.0   | 1.0 | 0.0 | 0.292 | 1.0   | 34.4 | 11.6 | -40.3 | 42.0  | 285  | 0.25     | 0.0   | 1.0 |     |
| 323                                                                                                             | 286        | 286        | 0.266            | 0.0                         | 1.0               | 29.4                        | 43.3              | -31.8             | 53.8                         | 323                                                                                                               | 0.0               | 0.291             | 1.0   | 34.3 | 11.6  | -40.3 | 42.0  | 286  | 0.267    | 0.0   | 1.0 | 0.0 | 0.281 | 1.0   | 34.0 | 12.3 | -40.3 | 42.2  | 286  | 0.267    | 0.0   | 1.0 |     |
| 325                                                                                                             | 287        | 287        | 0.283            | 0.0                         | 1.0               | 29.9                        | 44.7              | -31.1             | 54.4                         | 325                                                                                                               | 0.0               | 0.28              | 1.0   | 33.9 | 12.3  | -40.3 | 42.2  | 287  | 0.283    | 0.0   | 1.0 | 0.0 | 0.27  | 1.0   | 33.6 | 13.0 | -40.2 | 42.4  | 287  | 0.283    | 0.0   | 1.0 |     |
| 326                                                                                                             | 288        | 288        | 0.3              | 0.0                         | 1.0               | 30.4                        | 46.0              | -30.3             | 55.1                         | 326                                                                                                               | 0.0               | 0.269             | 1.0   | 33.5 | 13.1  | -40.2 | 42.4  | 288  | 0.3      | 0.0   | 1.0 | 0.0 | 0.26  | 1.0   | 33.2 | 13.7 | -40.2 | 42.5  | 288  | 0.3      | 0.0   | 1.0 |     |
| 328                                                                                                             | 289        |            |                  |                             |                   |                             |                   |                   |                              |                                                                                                                   |                   |                   |       |      |       |       |       |      |          |       |     |     |       |       |      |      |       |       |      |          |       |     |     |

Data of Maximum color M in colorimetric system Offset standard print; separation cmy0\*, D65 for input or output; Six hue angles of the 60 degree standard colours  $RYGCBM_s$ :  $h_{ab,ds} = 30.0, 90.0, 150.0, 210.0, 270.0, 330.0$ ;  
Six hue angles of the device colours  $RYGCBM_d$ :  $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours  $RYGCBM_e$ :  $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$

| Six hue angles of the device colours RYGBM <sub>d</sub> : $h_{ab,d} = 32.3, 96.1, 155.5, 238.4, 306.2, 359.8$ ; Six hue angles of the elementary colours RYGBM <sub>e</sub> : $h_{ab,e} = 25.5, 92.3, 162.2, 217.0, 271.7, 328.6$ |            |            |                  |                            |                   |                              |                   |                   |                              |                   |              |              |     |      |      |       |      |     |           |     |       |       |       |     |      |      |       |      |     |           |     |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------------|----------------------------|-------------------|------------------------------|-------------------|-------------------|------------------------------|-------------------|--------------|--------------|-----|------|------|-------|------|-----|-----------|-----|-------|-------|-------|-----|------|------|-------|------|-----|-----------|-----|-------|
| $h_{ab,d}$                                                                                                                                                                                                                        | $h_{ab,s}$ | $h_{ab,e}$ | $rgb^*_{dd361M}$ | $LAB^*_{d361Mi}$ (x=LabCh) | $rgb^*_{ds361Mi}$ | $LAB^*_{dsx361Mi}$ (x=LabCh) | $rgb^*_{dd361Mi}$ | $rgb^*_{de361Mi}$ | $LAB^*_{dex361Mi}$ (x=LabCh) | $rgb^*_{dd361Mi}$ | $rgb^*_{ds}$ | $rgb^*_{de}$ |     |      |      |       |      |     |           |     |       |       |       |     |      |      |       |      |     |           |     |       |
| 340                                                                                                                                                                                                                               | 300        | 300        | 0.5              | 0.0                        | 1.0               | 35.6                         | 58.6              | -20.7             | 62.1                         | 340               | 0.0          | 0.109        | 1.0 | 28.2 | 23.3 | -40.3 | 46.6 | 300 | 0.5       | 0.0 | 1.0   | 0.0   | 0.106 | 1.0 | 28.1 | 23.5 | -40.3 | 46.7 | 300 | 0.5       | 0.0 | 1.0   |
| 341                                                                                                                                                                                                                               | 301        | 301        | 0.516            | 0.0                        | 1.0               | 35.9                         | 59.5              | -19.9             | 62.8                         | 341               | 0.0          | 0.091        | 1.0 | 27.7 | 24.3 | -40.3 | 47.2 | 301 | 0.517     | 0.0 | 1.0   | 0.0   | 0.089 | 1.0 | 27.6 | 24.4 | -40.3 | 47.2 | 301 | 0.517     | 0.0 | 1.0   |
| 342                                                                                                                                                                                                                               | 302        | 302        | 0.533            | 0.0                        | 1.0               | 36.2                         | 60.5              | -19.0             | 63.4                         | 342               | 0.0          | 0.074        | 1.0 | 27.2 | 25.3 | -40.4 | 47.7 | 302 | 0.533     | 0.0 | 1.0   | 0.0   | 0.073 | 1.0 | 27.2 | 25.4 | -40.4 | 47.8 | 302 | 0.533     | 0.0 | 1.0   |
| 343                                                                                                                                                                                                                               | 303        | 303        | 0.55             | 0.0                        | 1.0               | 36.6                         | 61.4              | -18.2             | 64.0                         | 343               | 0.0          | 0.056        | 1.0 | 26.7 | 26.3 | -40.4 | 48.3 | 303 | 0.55      | 0.0 | 1.0   | 0.0   | 0.056 | 1.0 | 26.7 | 26.3 | -40.4 | 48.3 | 303 | 0.55      | 0.0 | 1.0   |
| 344                                                                                                                                                                                                                               | 304        | 303        | 0.566            | 0.0                        | 1.0               | 36.9                         | 62.3              | -17.3             | 64.7                         | 344               | 0.0          | 0.039        | 1.0 | 26.2 | 27.3 | -40.4 | 48.9 | 304 | 0.567     | 0.0 | 1.0   | 0.0   | 0.039 | 1.0 | 26.2 | 27.3 | -40.4 | 48.8 | 303 | 0.567     | 0.0 | 1.0   |
| 345                                                                                                                                                                                                                               | 305        | 304        | 0.583            | 0.0                        | 1.0               | 37.2                         | 63.2              | -16.4             | 65.3                         | 345               | 0.0          | 0.021        | 1.0 | 25.7 | 28.3 | -40.4 | 49.4 | 305 | 0.583     | 0.0 | 1.0   | 0.0   | 0.023 | 1.0 | 25.7 | 28.2 | -40.4 | 49.4 | 304 | 0.583     | 0.0 | 1.0   |
| 346                                                                                                                                                                                                                               | 306        | 305        | 0.6              | 0.0                        | 1.0               | 37.6                         | 64.1              | -15.4             | 66.0                         | 346               | 0.0          | 0.004        | 1.0 | 25.2 | 29.4 | -40.3 | 50.0 | 306 | 0.6       | 0.0 | 1.0   | 0.0   | 0.006 | 1.0 | 25.3 | 29.2 | -40.3 | 49.9 | 305 | 0.6       | 0.0 | 1.0   |
| 347                                                                                                                                                                                                                               | 307        | 306        | 0.616            | 0.0                        | 1.0               | 37.9                         | 65.0              | -14.5             | 66.6                         | 347               | 0.011        | 0.0          | 1.0 | 25.3 | 30.2 | -40.0 | 50.2 | 307 | 0.617     | 0.0 | 1.0   | 0.009 | 0.0   | 1.0 | 25.3 | 30.1 | -40.1 | 50.2 | 306 | 0.617     | 0.0 | 1.0   |
| 348                                                                                                                                                                                                                               | 308        | 307        | 0.633            | 0.0                        | 1.0               | 38.3                         | 65.8              | -13.7             | 67.2                         | 348               | 0.026        | 0.0          | 1.0 | 25.7 | 31.0 | -39.6 | 50.3 | 308 | 0.633     | 0.0 | 1.0   | 0.023 | 0.0   | 1.0 | 25.6 | 30.8 | -39.7 | 50.3 | 307 | 0.633     | 0.0 | 1.0   |
| 348                                                                                                                                                                                                                               | 309        | 308        | 0.65             | 0.0                        | 1.0               | 38.8                         | 66.6              | -13.1             | 67.9                         | 348               | 0.041        | 0.0          | 1.0 | 26.0 | 31.8 | -39.1 | 50.5 | 309 | 0.65      | 0.0 | 1.0   | 0.036 | 0.0   | 1.0 | 25.9 | 31.5 | -39.3 | 50.4 | 308 | 0.65      | 0.0 | 1.0   |
| 349                                                                                                                                                                                                                               | 310        | 309        | 0.666            | 0.0                        | 1.0               | 39.3                         | 67.3              | -12.5             | 68.5                         | 349               | 0.056        | 0.0          | 1.0 | 26.3 | 32.5 | -38.7 | 50.6 | 310 | 0.667     | 0.0 | 1.0   | 0.05  | 0.0   | 1.0 | 26.2 | 32.3 | -38.8 | 50.6 | 309 | 0.667     | 0.0 | 1.0   |
| 350                                                                                                                                                                                                                               | 311        | 310        | 0.683            | 0.0                        | 1.0               | 39.8                         | 68.1              | -11.9             | 69.1                         | 350               | 0.07         | 0.0          | 1.0 | 26.7 | 33.3 | -38.2 | 50.8 | 311 | 0.683     | 0.0 | 1.0   | 0.064 | 0.0   | 1.0 | 26.5 | 33.0 | -38.4 | 50.7 | 310 | 0.683     | 0.0 | 1.0   |
| 350                                                                                                                                                                                                                               | 312        | 311        | 0.7              | 0.0                        | 1.0               | 40.3                         | 68.8              | -11.2             | 69.7                         | 350               | 0.085        | 0.0          | 1.0 | 27.0 | 34.1 | -37.7 | 50.9 | 312 | 0.7       | 0.0 | 1.0   | 0.078 | 0.0   | 1.0 | 26.9 | 33.7 | -37.9 | 50.8 | 311 | 0.7       | 0.0 | 1.0   |
| 351                                                                                                                                                                                                                               | 313        | 312        | 0.716            | 0.0                        | 1.0               | 40.8                         | 69.5              | -10.6             | 70.4                         | 351               | 0.1          | 0.0          | 1.0 | 27.3 | 34.8 | -37.2 | 51.0 | 313 | 0.717     | 0.0 | 1.0   | 0.092 | 0.0   | 1.0 | 27.2 | 34.4 | -37.5 | 51.0 | 312 | 0.717     | 0.0 | 1.0   |
| 351                                                                                                                                                                                                                               | 314        | 313        | 0.733            | 0.0                        | 1.0               | 41.3                         | 70.3              | -9.9              | 71.0                         | 351               | 0.114        | 0.0          | 1.0 | 27.7 | 35.5 | -36.7 | 51.2 | 314 | 0.733     | 0.0 | 1.0   | 0.106 | 0.0   | 1.0 | 27.5 | 35.1 | -37.0 | 51.1 | 313 | 0.733     | 0.0 | 1.0   |
| 352                                                                                                                                                                                                                               | 315        | 314        | 0.75             | 0.0                        | 1.0               | 41.8                         | 71.0              | -9.2              | 71.6                         | 352               | 0.13         | 0.0          | 1.0 | 27.9 | 36.3 | -36.2 | 51.3 | 315 | 0.75      | 0.0 | 1.0   | 0.12  | 0.0   | 1.0 | 27.8 | 35.8 | -36.5 | 51.2 | 314 | 0.75      | 0.0 | 1.0   |
| 353                                                                                                                                                                                                                               | 316        | 315        | 0.766            | 0.0                        | 1.0               | 42.1                         | 71.6              | -8.7              | 72.1                         | 353               | 0.146        | 0.0          | 1.0 | 28.1 | 37.1 | -35.7 | 51.6 | 316 | 0.767     | 0.0 | 1.0   | 0.135 | 0.0   | 1.0 | 28.0 | 36.6 | -36.0 | 51.4 | 315 | 0.767     | 0.0 | 1.0   |
| 353                                                                                                                                                                                                                               | 317        | 316        | 0.783            | 0.0                        | 1.0               | 42.4                         | 72.1              | -8.1              | 72.6                         | 353               | 0.163        | 0.0          | 1.0 | 28.2 | 37.9 | -35.3 | 51.8 | 317 | 0.783     | 0.0 | 1.0   | 0.151 | 0.0   | 1.0 | 28.1 | 37.3 | -35.6 | 51.7 | 316 | 0.783     | 0.0 | 1.0   |
| 353                                                                                                                                                                                                                               | 318        | 317        | 0.8              | 0.0                        | 1.0               | 42.7                         | 72.7              | -7.6              | 73.1                         | 353               | 0.18         | 0.0          | 1.0 | 28.3 | 38.7 | -34.8 | 52.1 | 318 | 0.8       | 0.0 | 1.0   | 0.167 | 0.0   | 1.0 | 28.2 | 38.1 | -35.1 | 51.9 | 317 | 0.8       | 0.0 | 1.0   |
| 354                                                                                                                                                                                                                               | 319        | 318        | 0.816            | 0.0                        | 1.0               | 43.1                         | 73.2              | -7.0              | 73.6                         | 354               | 0.197        | 0.0          | 1.0 | 28.5 | 39.5 | -34.2 | 52.4 | 319 | 0.817     | 0.0 | 1.0   | 0.183 | 0.0   | 1.0 | 28.4 | 38.9 | -34.7 | 52.1 | 318 | 0.817     | 0.0 | 1.0   |
| 354                                                                                                                                                                                                                               | 320        | 319        | 0.833            | 0.0                        | 1.0               | 43.4                         | 73.8              | -6.5              | 74.1                         | 354               | 0.213        | 0.0          | 1.0 | 28.6 | 40.3 | -33.7 | 52.6 | 320 | 0.833     | 0.0 | 1.0   | 0.199 | 0.0   | 1.0 | 28.5 | 39.6 | -34.2 | 52.4 | 319 | 0.833     | 0.0 | 1.0   |
| 355                                                                                                                                                                                                                               | 321        | 320        | 0.85             | 0.0                        | 1.0               | 43.7                         | 74.3              | -5.9              | 74.6                         | 355               | 0.23         | 0.0          | 1.0 | 28.7 | 41.1 | -33.2 | 52.9 | 321 | 0.85      | 0.0 | 1.0   | 0.215 | 0.0   | 1.0 | 28.6 | 40.4 | -33.7 | 52.6 | 320 | 0.85      | 0.0 | 1.0   |
| 355                                                                                                                                                                                                                               | 322        | 321        | 0.866            | 0.0                        | 1.0               | 44.0                         | 74.9              | -5.3              | 75.1                         | 355               | 0.247        | 0.0          | 1.0 | 28.9 | 41.9 | -32.6 | 53.1 | 322 | 0.867     | 0.0 | 1.0   | 0.231 | 0.0   | 1.0 | 28.7 | 41.1 | -33.2 | 52.9 | 321 | 0.867     | 0.0 | 1.0   |
| 356                                                                                                                                                                                                                               | 323        | 321        | 0.883            | 0.0                        | 1.0               | 44.3                         | 75.4              | -4.7              | 75.6                         | 356               | 0.259        | 0.0          | 1.0 | 29.2 | 42.7 | -32.1 | 53.5 | 323 | 0.883     | 0.0 | 1.0   | 0.247 | 0.0   | 1.0 | 28.9 | 41.8 | -32.6 | 53.1 | 321 | 0.883     | 0.0 | 1.0   |
| 356                                                                                                                                                                                                                               | 324        | 322        | 0.9              | 0.0                        | 1.0               | 44.6                         | 76.0              | -4.1              | 76.1                         | 356               | 0.27         | 0.0          | 1.0 | 29.5 | 43.7 | -31.6 | 54.0 | 324 | 0.9       | 0.0 | 1.0   | 0.258 | 0.0   | 1.0 | 29.2 | 42.7 | -32.1 | 53.5 | 322 | 0.9       | 0.0 | 1.0   |
| 357                                                                                                                                                                                                                               | 325        | 323        | 0.916            | 0.0                        | 1.0               | 44.8                         | 76.6              | -3.5              | 76.6                         | 357               | 0.282        | 0.0          | 1.0 | 29.9 | 44.6 | -31.1 | 54.4 | 325 | 0.917     | 0.0 | 1.0   | 0.269 | 0.0   | 1.0 | 29.5 | 43.5 | -31.7 | 53.9 | 323 | 0.917     | 0.0 | 1.0   |
| 357                                                                                                                                                                                                                               | 326        | 324        | 0.933            | 0.0                        | 1.0               | 45.1                         | 77.1              | -2.8              | 77.2                         | 357               | 0.293        | 0.0          | 1.0 | 30.2 | 45.5 | -30.6 | 54.8 | 326 | 0.933     | 0.0 | 1.0   | 0.28  | 0.0   | 1.0 | 29.8 | 44.4 | -31.2 | 54.3 | 324 | 0.933     | 0.0 | 1.0   |
| 358                                                                                                                                                                                                                               | 327        | 325        | 0.95             | 0.0                        | 1.0               | 45.3                         | 77.7              | -2.2              | 77.7                         | 358               | 0.304        | 0.0          | 1.0 | 30.6 | 46.4 | -30.0 | 55.3 | 327 | 0.95      | 0.0 | 1.0   | 0.29  | 0.0   | 1.0 | 30.1 | 45.2 | -30.7 | 54.7 | 325 | 0.95      | 0.0 | 1.0   |
| 358                                                                                                                                                                                                                               | 328        | 326        | 0.966            | 0.0                        | 1.0               | 45.6                         | 78.2              | -1.5              | 78.2                         | 358               | 0.315        | 0.0          | 1.0 | 30.9 | 47.2 | -29.4 | 55.7 | 328 | 0.967     | 0.0 | 1.0   | 0.301 | 0.0   | 1.0 | 30.5 | 46.1 | -30.2 | 55.1 | 326 | 0.967     | 0.0 | 1.0   |
| 359                                                                                                                                                                                                                               | 329        | 327        | 0.983            | 0.0                        | 1.0               | 45.8                         | 78.7              | -0.8              | 78.7                         | 359               | 0.326        | 0.0          | 1.0 | 31.3 | 48.1 | -28.8 | 56.1 | 329 | 0.983     | 0.0 | 1.0   | 0.311 | 0.0   | 1.0 | 30.8 | 46.9 | -29.6 | 55.6 | 327 | 0.983     | 0.0 | 1.0   |
| 359                                                                                                                                                                                                                               | 330        | 328        | 1.0              | 0.0                        | 1.0               | 46.1                         | 79.3              | -0.2              | 79.3                         | 359               | $M_d$ 0.337  | 0.0          | 1.0 | 31.6 | 49.0 | -28.2 | 56.6 | 330 | $M_s$ 1.0 | 0.0 | 1.0   | 0.322 | 0.0   | 1.0 | 31.1 | 47.8 | -29.1 | 56.0 | 328 | $M_e$ 1.0 | 0.0 | 1.0   |
| 360                                                                                                                                                                                                                               | 331        | 329        | 1.0              | 0.0                        | 0.983             | 46.1                         | 79.1              | 0.3               | 79.1                         | 360               | 0.349        | 0.0          | 1.0 | 32.0 | 49.9 | -27.5 | 57.0 | 331 | 1.0       | 0.0 | 0.983 | 0.332 | 0.0   | 1.0 | 31.5 | 48.6 | -28.5 | 56.4 | 329 | 1.0       | 0.0 | 0.983 |
| 360                                                                                                                                                                                                                               | 332        | 330        | 1.0              | 0.0                        | 0.966             | 46.0                         | 79.0              | 0.9               | 79.0                         | 360               | 0.36         | 0.0          | 1.0 | 32.3 | 50.7 | -26.9 | 57.5 | 332 | 1.0       | 0.0 | 0.967 | 0.343 | 0.0   | 1.0 | 31.8 | 49.4 | -27.9 | 56.8 | 330 | 1.0       | 0.0 | 0.967 |
| 361                                                                                                                                                                                                                               | 333        | 331        | 1.0              | 0.0                        | 0.95              | 46.0                         | 78.9              | 1.5               | 78.9                         | 361               | 0.371        | 0.0          | 1.0 | 32.7 | 51.6 | -26.2 | 57.9 | 333 | 1.0       | 0.0 | 0.95  | 0.354 | 0.0   | 1.0 | 32.1 | 50.3 | -27.2 | 57.2 | 331 | 1.0       | 0.0 | 0.95  |
| 361                                                                                                                                                                                                                               | 334        | 332        | 1.0              | 0.0                        | 0.933             | 46.0                         | 78.7              | 2.1               | 78.8                         | 361               | 0.386        | 0.0          | 1.0 | 33.0 | 52.5 | -25.5 | 58.4 | 334 | 1.0       | 0.0 | 0.933 | 0.364 | 0.0   | 1.0 | 32.4 | 51.1 | -26.6 | 57.6 | 332 | 1.0       | 0.0 | 0.933 |
| 361                                                                                                                                                                                                                               | 335        | 333        | 1.0              | 0.0                        | 0.916             | 46.0                         | 78.6              | 2.7               | 78.6                         | 361               | 0.404        | 0.0          | 1.0 | 33.4 | 53.5 | -24.8 | 59.0 | 335 | 1.0       | 0.0 | 0.917 | 0.375 | 0.0   | 1.0 | 32.8 | 51.9 | -25.9 | 58.0 | 333 | 1.0       | 0.0 | 0.917 |
| 362                                                                                                                                                                                                                               | 336        | 334        | 1.0              | 0.0                        | 0.9               | 46.0                         | 78.4              | 3.2               | 78.5                         | 362               | 0.421        | 0.0          | 1.0 | 33.8 | 54.4 | -24.1 | 59.6 | 336 | 1.0       | 0.0 | 0.9   | 0.391 | 0.0   | 1.0 | 33.1 | 52.8 | -25.3 | 58.6 | 334 | 1.0       | 0.0 | 0.9   |
| 362                                                                                                                                                                                                                               | 337        | 335        | 1.0              | 0.0                        | 0.883             | 45.9                         | 78.3              | 3.8               | 78.4                         | 362               | 0.438        | 0.0          | 1.0 | 34.2 | 55.4 | -23.4 | 60.1 | 337 | 1.0       | 0.0 | 0.883 | 0.408 | 0.0   | 1.0 | 33.5 | 53.7 | -24.7 | 59.1 | 335 | 1.0       | 0.0 | 0.883 |
| 363                                                                                                                                                                                                                               | 338        | 336        | 1.0              | 0.0                        | 0.866             | 45.9                         | 78.1              | 4.4               | 78.3                         | 363               | 0.456        | 0.0          | 1.0 | 34.6 | 56.3 | -22.6 | 60.7 | 338 | 1.0       | 0.0 | 0.867 | 0.424 | 0.0   | 1.0 | 33.9 | 54.6 | -24.0 | 59.7 | 336 | 1.0       | 0.0 | 0.867 |
| 363                                                                                                                                                                                                                               | 339        | 337        | 1.0              | 0.0                        | 0.85              | 45.9                         | 78.0              | 5.0               | 78.2                         | 363               | 0.473        | 0.0          | 1.0 | 35.0 | 57.2 | -21.9 | 61.3 | 339 | 1.0       | 0.0 | 0.85  | 0.441 | 0.0   | 1.0 | 34.3 | 55.5 | -23.3 | 60.2 | 337 | 1.0       | 0.0 | 0.85  |
| 364                                                                                                                                                                                                                               | 340        | 338        | 1.0              | 0.0                        | 0.833             | 45.9                         | 77.9              | 5.6               | 78.1                         | 364               | 0.491        | 0.0          | 1.0 | 35.4 | 58.1 | -21.1 | 61.9 | 340 | 1.0       | 0.0 | 0.833 | 0.457 | 0.0   | 1.0 | 34.6 | 56.4 | -22.6 | 60.8 | 338 | 1.0       | 0.0 | 0.833 |
| 364                                                                                                                                                                                                                               | 341        | 339        | 1.0              | 0.0                        | 0.816             | 45.9                         | 77.7              | 6.2               | 78.0                         | 364               | 0.508        | 0.0          | 1.0 | 35.8 | 59.1 | -20.2 | 62.5 | 341 | 1.0       | 0.0 | 0     |       |       |     |      |      |       |      |     |           |     |       |

1-1031531-L0 QE170-72 LAB\*la0, YN=0%, XYZnw=3.6, 4.2, 6.1, 85.4, 89.1, 104.8, LAB\*nw=24.4, 0.0, 0.0, 95.6, 0.0, 0.0

Output: Offset standard print; separation cmy0\*, D65, page 16/33

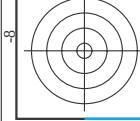
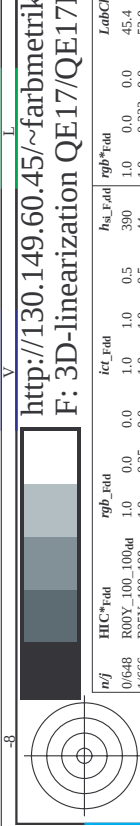
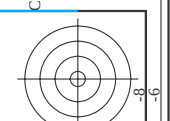
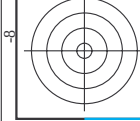
TUB-test chart QE17; hue code:  $H^*_d=R50Y_d$   
48 step hue circles;  $rgb-LabCh^*$  tables

input:  $rgb/cmyk \rightarrow rgb_{dd}$   
output: 3D-linearization to  $cmy0^*_{dd}$

TUB registration: 20130201-QE17/QE17L0FA.TXT /PS  
application for measurement of offset print output, separation cmy0\* (CMY0)  
TUB material: code=rha4ta

Output: Offset standard print; separation cmy0\*, D65, page 17/33





| Mean color difference of this page: |                |         |         |         |         |          |               |               |         | delta   |          |               |               |         |         |          |               |               |         |
|-------------------------------------|----------------|---------|---------|---------|---------|----------|---------------|---------------|---------|---------|----------|---------------|---------------|---------|---------|----------|---------------|---------------|---------|
| n/f                                 | HfC*Fid        | rgb_Fid | icr_Fid | hsa_Fid | rgb*Fid | LabC*Fid | cmyk*_sep_Fid | cmyn*_sep_Fid | rgb*Mid | hsa_Mid | LabC*Mid | cmyn*_sep_Mid | cmyn*_sep_Mid | rgb*Mid | hsa_Mid | LabC*Mid | cmyn*_sep_Mid | cmyn*_sep_Mid | rgb*Mid |
| 0/648                               | R00Y_100_100ad | 1.0     | 0.0     | 0.0     | 1.0     | 0.0      | 0.0           | 0.0           | 1.0     | 0.0     | 0.0      | 0.0           | 0.0           | 1.0     | 0.0     | 0.0      | 0.0           | 0.0           | 1.0     |
| 1/666                               | R25Y_100_100ad | 0.0     | 0.25    | 0.0     | 0.0     | 0.233    | 0.0           | 0.765         | 0.0     | 0.233   | 0.0      | 0.765         | 0.0           | 0.0     | 0.233   | 0.0      | 0.765         | 0.0           | 0.0     |
| 2/684                               | R50Y_100_100ad | 0.0     | 0.5     | 0.0     | 0.0     | 0.466    | 0.0           | 0.534         | 0.0     | 0.466   | 0.0      | 0.534         | 0.0           | 0.0     | 0.466   | 0.0      | 0.534         | 0.0           | 0.0     |
| 3/702                               | R75Y_100_100ad | 0.0     | 0.75    | 0.0     | 0.0     | 0.7      | 0.0           | 0.23          | 0.0     | 0.7     | 0.0      | 0.23          | 0.0           | 0.0     | 0.7     | 0.0      | 0.23          | 0.0           | 0.0     |
| 4/720                               | Y00C_100_100ad | 0.0     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 5/558                               | Y25C_100_100ad | 0.75    | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 6/396                               | Y50C_100_100ad | 0.5     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 7/234                               | Y75C_100_100ad | 0.25    | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 8/72                                | G00B_100_100ad | 0.0     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 9/72                                | G25B_100_100ad | 0.0     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 10/76                               | G50B_100_100ad | 0.0     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 11/80                               | G75B_100_100ad | 0.0     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 12/44                               | B00M_100_100ad | 0.0     | 0.5     | 1.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 13/8                                | B25M_100_100ad | 0.0     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 14/332                              | B50M_100_100ad | 0.5     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 15/652                              | B75M_100_100ad | 1.0     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 16/652                              | B00R_100_100ad | 0.0     | 0.0     | 1.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 17/648                              | R00Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 18/608                              | R00Y_100_050ad | 1.0     | 0.5     | 0.5     | 0.0     | 0.5      | 0.5           | 0.5           | 0.0     | 0.5     | 0.5      | 0.5           | 0.5           | 0.0     | 0.5     | 0.5      | 0.5           | 0.5           | 0.0     |
| 19/676                              | R25Y_100_050ad | 0.75    | 1.0     | 0.5     | 0.0     | 0.75     | 0.5           | 0.25          | 0.75    | 0.5     | 0.75     | 0.5           | 0.25          | 0.75    | 0.5     | 0.75     | 0.5           | 0.25          | 0.75    |
| 20/724                              | Y00C_100_050ad | 0.0     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 21/624                              | Y25C_100_050ad | 0.75    | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 22/400                              | Y50C_100_050ad | 0.5     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 23/400                              | Y75C_100_050ad | 0.25    | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 24/688                              | B00R_100_050ad | 0.0     | 0.5     | 1.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 25/692                              | B50R_100_050ad | 0.5     | 1.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 26/688                              | R00Y_100_050ad | 1.0     | 0.5     | 0.5     | 0.0     | 0.5      | 0.5           | 0.5           | 0.0     | 0.5     | 0.5      | 0.5           | 0.5           | 0.0     | 0.5     | 0.5      | 0.5           | 0.5           | 0.0     |
| 27/506                              | R00Y_075_050ad | 0.75    | 0.25    | 0.25    | 0.75    | 0.25     | 0.25          | 0.25          | 0.75    | 0.25    | 0.25     | 0.25          | 0.25          | 0.75    | 0.25    | 0.25     | 0.25          | 0.25          | 0.75    |
| 28/524                              | R50Y_075_050ad | 0.75    | 0.5     | 0.5     | 0.5     | 0.5      | 0.5           | 0.5           | 0.5     | 0.5     | 0.5      | 0.5           | 0.5           | 0.5     | 0.5     | 0.5      | 0.5           | 0.5           | 0.5     |
| 29/542                              | Y00C_075_050ad | 0.75    | 0.75    | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    | 0.25    | 0.75     | 0.25          | 0.75          | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    |
| 30/380                              | Y50C_075_050ad | 0.25    | 0.75    | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    | 0.25    | 0.75     | 0.25          | 0.75          | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    |
| 31/218                              | G00B_075_050ad | 0.25    | 0.75    | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    | 0.25    | 0.75     | 0.25          | 0.75          | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    |
| 32/222                              | G50B_075_050ad | 0.25    | 0.75    | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    | 0.25    | 0.75     | 0.25          | 0.75          | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    |
| 33/186                              | B00R_075_050ad | 0.25    | 0.25    | 0.75    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    | 0.25    | 0.75     | 0.25          | 0.75          | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    |
| 34/510                              | B50R_075_050ad | 0.75    | 0.25    | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    | 0.25    | 0.75     | 0.25          | 0.75          | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    |
| 35/506                              | R00Y_075_050ad | 0.75    | 0.25    | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    | 0.25    | 0.75     | 0.25          | 0.75          | 0.25    | 0.75    | 0.25     | 0.75          | 0.25          | 0.75    |
| 36/324                              | R00Y_050_050ad | 0.5     | 0.0     | 0.0     | 0.5     | 0.0      | 0.0           | 0.0           | 0.5     | 0.0     | 0.0      | 0.0           | 0.0           | 0.5     | 0.0     | 0.0      | 0.0           | 0.0           | 0.5     |
| 37/342                              | R50Y_050_050ad | 0.5     | 0.25    | 0.25    | 0.5     | 0.25     | 0.25          | 0.25          | 0.5     | 0.25    | 0.25     | 0.25          | 0.25          | 0.5     | 0.25    | 0.25     | 0.25          | 0.25          | 0.5     |
| 38/360                              | Y00C_050_050ad | 0.5     | 0.5     | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     | 0.0     | 0.5      | 0.0           | 0.5           | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     |
| 39/198                              | Y50C_050_050ad | 0.25    | 0.5     | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     | 0.0     | 0.5      | 0.0           | 0.5           | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     |
| 40/36                               | G00B_050_050ad | 0.0     | 0.5     | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     | 0.0     | 0.5      | 0.0           | 0.5           | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     |
| 41/40                               | G50B_050_050ad | 0.0     | 0.5     | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     | 0.0     | 0.5      | 0.0           | 0.5           | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     |
| 42/4                                | B00R_050_050ad | 0.0     | 0.5     | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     | 0.0     | 0.5      | 0.0           | 0.5           | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     |
| 43/328                              | B50R_050_050ad | 0.5     | 0.0     | 0.5     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     | 0.0     | 0.5      | 0.0           | 0.5           | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     |
| 44/324                              | R00Y_050_050ad | 0.5     | 0.0     | 0.5     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     | 0.0     | 0.5      | 0.0           | 0.5           | 0.0     | 0.5     | 0.0      | 0.5           | 0.0           | 0.5     |
| 45/0                                | NW_000ad       | 0.0     | 0.0     | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     | 0.0     | 0.0      | 0.0           | 0.0           | 0.0     |
| 46/91                               | NW_013ad       | 0.125   | 0.125   | 0.125   | 0.125   | 0.125    | 0.125         | 0.125         | 0.125   | 0.125   | 0.125    | 0.125         | 0.125         | 0.125   | 0.125   | 0.125    | 0.125         | 0.125         | 0.125   |
| 47/182                              | NW_025ad       | 0.25    | 0.25    | 0.25    | 0.25    | 0.25     | 0.25          | 0.25          | 0.25    | 0.25    | 0.25     | 0.25          | 0.25          | 0.25    | 0.25    | 0.25     | 0.25          | 0.25          | 0.25    |
| 48/273                              | NW_038ad       | 0.375   | 0.375   | 0.375   | 0.375   | 0.375    | 0.375         | 0.375         | 0.375   | 0.375   | 0.375    | 0.375         | 0.375         | 0.375   | 0.375   | 0.375    | 0.375         | 0.375         | 0.375   |
| 49/364                              | NW_050ad       | 0.5     | 0.5     | 0.5     | 0.5     | 0.5      | 0.5           | 0.5           | 0.5     | 0.5     | 0.5      | 0.5           | 0.5           | 0.5     | 0.5     | 0.5      | 0.5           | 0.5           | 0.5     |
| 50/455                              | NW_065ad       | 0.625   | 0.625   | 0.625   | 0.625   | 0.625    | 0.625         | 0.625         | 0.625   | 0.625   | 0.625    | 0.625         | 0.625         | 0.625   | 0.625   | 0.625    | 0.625         | 0.625         | 0.625   |
| 51/66                               | NW_080ad       | 0.75    | 0.75    | 0.75    | 0.75    | 0.75     | 0.75          | 0.75          | 0.75    | 0.75    | 0.75     | 0.75          | 0.75          | 0.75    | 0.75    | 0.75     | 0.75          | 0.75          | 0.75    |
| 52/66                               | NW_095ad       | 0.875   | 0.875   | 0.875   | 0.875   | 0.875    | 0.875         | 0.875         | 0.875   | 0.875   | 0.875    | 0.875         | 0.875         | 0.875   | 0.875   | 0.875    | 0.875         | 0.875         | 0.875   |
| 53/728                              | NW_100ad       | 1.0     | 1.0     | 1.0     | 1.0     | 1.0      | 1.0           | 1.0           | 1.0     | 1.0     | 1.0      | 1.0           | 1.0           | 1.0     | 1.0     | 1.0      | 1.0           | 1.0           | 1.0     |

|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|--------------------------------------------|--|--|--|--|--|--|--|--|--|--------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| TUB-test chart QE17; hue code: H*_d=R50Y_d |  |  |  |  |  |  |  |  |  | input: <i>rgb/cmyk</i> - > <i>rgb</i> <sub>dd</sub>    |  |  |  |  |  |  |  |  |  |
| colors and differences, Δ <i>E</i> ,*      |  |  |  |  |  |  |  |  |  | output: 3D-linearization to <i>cmy0*</i> <sub>dd</sub> |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
|                                            |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |
| </                                         |  |  |  |  |  |  |  |  |  |                                                        |  |  |  |  |  |  |  |  |  |



TUB registration: 20130201-QE17/QE17L0FA.TXT /.PS  
application for measurement of offset print output, separate

TUB material: code=rha4ta  
ny0\* (CMY0)



V L O Y M  
http://130.149.60.45/~farbmatrik/QE17/QE17L0FA.TXT /PS; 3D-linearization  
F: 3D-linearization QE17/QE17LE30FA.DAT in file (F), page 20/33

| HIC*Fid | rgb_Fid | iCr_Fid | hsa_Fid | rgb*Fid | LabCh*Fid | cmyn*sep_Fid |       |       | hsa_ad | rgb*ad | LabCh*ad | HIC*ad |
|---------|---------|---------|---------|---------|-----------|--------------|-------|-------|--------|--------|----------|--------|
|         |         |         |         |         |           | 0.0          | 1.0   | 1.0   |        |        |          |        |
| 00      | 0.0     | 0.0     | 360     | 0.0     | 24.3      | 0.0          | 0.0   | 0.0   | 1.0    | 1.0    | 95.6     | 0.0    |
| 01      | 0.0     | 0.125   | 0.062   | 270     | 0.0       | 0.0          | 6.2   | 306.2 | 0.816  | 0.0    | 25.0     | 0.0    |
| 02      | 0.0     | 0.125   | 0.125   | 0.0     | 0.0       | 0.125        | 24.4  | 3.6   | 0.986  | 0.0    | 25.0     | 0.0    |
| 03      | 0.0     | 0.125   | 0.125   | 0.0     | 0.0       | 0.125        | 24.5  | 7.3   | 0.984  | 0.994  | 0.984    | 0.0    |
| 04      | 0.0     | 0.375   | 0.187   | 270     | 0.0       | 0.0          | 15.1  | 18.7  | 0.568  | 0.0    | 25.0     | 0.0    |
| 05      | 0.0     | 0.5     | 0.25    | 270     | 0.0       | 0.0          | 14.7  | 20.2  | 0.359  | 0.0    | 25.0     | 0.0    |
| 06      | 0.0     | 0.625   | 0.312   | 270     | 0.0       | 0.0          | 0.625 | 24.8  | 1.0    | 0.454  | 0.0      | 0.0    |
| 07      | 0.0     | 0.75    | 0.375   | 270     | 0.0       | 0.0          | 22.1  | 30.3  | 0.982  | 1.0    | 25.0     | 0.0    |
| 08      | 0.0     | 0.875   | 0.437   | 270     | 0.0       | 0.0          | 0.875 | 34.8  | 0.984  | 1.0    | 25.0     | 0.0    |
| 09      | 0.0     | 1.0     | 0.5     | 270     | 0.0       | 0.0          | 29.5  | 40.4  | 0.999  | 1.0    | 25.0     | 0.0    |
| 10      | 0.0     | 1.0     | 0.5     | 270     | 0.0       | 0.0          | 8.9   | 15.5  | 0.992  | 0.866  | 1.0      | 0.0    |
| 11      | 0.0     | 0.125   | 0.062   | 150     | 0.0       | 0.125        | 0.0   | 6.0   | 0.979  | 0.849  | 0.731    | 0.0    |
| 12      | 0.0     | 0.125   | 0.125   | 240     | 0.0       | 0.125        | 0.125 | 28.4  | 0.978  | 0.846  | 0.615    | 0.0    |
| 13      | 0.0     | 0.375   | 0.187   | 251     | 0.0       | 0.118        | 0.375 | 28.3  | 0.978  | 0.857  | 0.529    | 0.0    |
| 14      | 0.0     | 0.625   | 0.312   | 259     | 0.0       | 0.114        | 0.625 | 28.2  | 0.981  | 0.879  | 0.342    | 0.0    |
| 15      | 0.0     | 0.75    | 0.375   | 261     | 0.0       | 0.112        | 0.75  | 28.2  | 0.984  | 0.886  | 0.238    | 0.0    |
| 16      | 0.0     | 0.875   | 0.437   | 262     | 0.0       | 0.116        | 0.875 | 28.3  | 0.983  | 0.883  | 0.127    | 0.0    |
| 17      | 0.0     | 1.0     | 0.5     | 263     | 0.0       | 0.116        | 1.0   | 28.4  | 0.982  | 0.882  | 0.0      | 0.0    |
| 18      | 0.0     | 1.0     | 0.5     | 263     | 0.0       | 0.116        | 1.0   | 28.4  | 0.982  | 0.882  | 0.0      | 0.0    |
| 19      | 0.0     | 0.25    | 0.125   | 150     | 0.0       | 0.25         | 0.0   | 30.7  | 0.986  | 0.984  | 0.984    | 0.0    |
| 20      | 0.0     | 0.25    | 0.125   | 180     | 0.0       | 0.25         | 0.125 | 31.5  | 0.985  | 0.985  | 0.754    | 0.0    |
| 21      | 0.0     | 0.25    | 0.125   | 210     | 0.0       | 0.25         | 0.125 | 32.4  | 0.972  | 0.972  | 0.574    | 0.0    |
| 22      | 0.0     | 0.375   | 0.187   | 229     | 0.0       | 0.256        | 0.375 | 33.3  | 0.971  | 0.971  | 0.464    | 0.0    |
| 23      | 0.0     | 0.625   | 0.312   | 247     | 0.0       | 0.259        | 0.625 | 32.6  | 0.976  | 0.976  | 0.359    | 0.0    |
| 24      | 0.0     | 0.75    | 0.375   | 251     | 0.0       | 0.259        | 0.75  | 32.5  | 0.981  | 0.981  | 0.247    | 0.0    |
| 25      | 0.0     | 0.875   | 0.437   | 254     | 0.0       | 0.323        | 0.875 | 32.5  | 0.987  | 0.987  | 0.136    | 0.0    |
| 26      | 0.0     | 1.0     | 0.5     | 254     | 0.0       | 0.323        | 1.0   | 32.5  | 0.987  | 0.987  | 0.023    | 0.0    |
| 27      | 0.0     | 0.375   | 0.187   | 169     | 0.0       | 0.375        | 0.0   | 34.0  | 0.983  | 0.983  | 0.641    | 0.0    |
| 28      | 0.0     | 0.375   | 0.187   | 191     | 0.0       | 0.375        | 0.187 | 34.6  | 0.985  | 0.985  | 0.636    | 0.0    |
| 29      | 0.0     | 0.375   | 0.187   | 210     | 0.0       | 0.375        | 0.375 | 35.6  | 0.978  | 0.978  | 0.63     | 0.0    |
| 30      | 0.0     | 0.375   | 0.187   | 224     | 0.0       | 0.383        | 0.5   | 37.6  | 0.967  | 0.967  | 0.461    | 0.0    |
| 31      | 0.0     | 0.625   | 0.312   | 233     | 0.0       | 0.385        | 0.625 | 38.0  | 0.971  | 0.971  | 0.371    | 0.0    |
| 32      | 0.0     | 0.75    | 0.375   | 240     | 0.0       | 0.374        | 0.75  | 37.3  | 0.976  | 0.976  | 0.6      | 0.0    |
| 33      | 0.0     | 0.875   | 0.437   | 245     | 0.0       | 0.364        | 0.875 | 37.0  | 0.981  | 0.981  | 0.615    | 0.0    |
| 34      | 0.0     | 1.0     | 0.5     | 248     | 0.0       | 0.366        | 1.0   | 37.2  | 0.991  | 0.991  | 0.623    | 0.0    |
| 35      | 0.0     | 0.5     | 0.25    | 150     | 0.0       | 0.5          | 0.0   | 37.0  | 0.982  | 0.982  | 0.524    | 0.0    |
| 36      | 0.0     | 0.5     | 0.25    | 164     | 0.0       | 0.5          | 0.116 | 37.7  | 0.985  | 0.985  | 0.519    | 0.0    |
| 37      | 0.0     | 0.5     | 0.25    | 180     | 0.0       | 0.5          | 0.25  | 38.6  | 0.983  | 0.983  | 0.514    | 0.0    |
| 38      | 0.0     | 0.5     | 0.25    | 196     | 0.0       | 0.5          | 0.383 | 39.7  | 0.974  | 0.974  | 0.515    | 0.0    |
| 39      | 0.0     | 0.5     | 0.25    | 210     | 0.0       | 0.5          | 0.5   | 40.5  | 0.967  | 0.967  | 0.525    | 0.0    |
| 40      | 0.0     | 0.625   | 0.312   | 221     | 0.0       | 0.512        | 0.625 | 41.9  | 0.973  | 0.973  | 0.496    | 0.0    |
| 41      | 0.0     | 0.75    | 0.375   | 229     | 0.0       | 0.517        | 0.75  | 42.3  | 0.982  | 0.982  | 0.486    | 0.0    |
| 42      | 0.0     | 0.875   | 0.437   | 235     | 0.0       | 0.51         | 0.875 | 42.3  | 0.991  | 0.991  | 0.485    | 0.0    |
| 43      | 0.0     | 1.0     | 0.5     | 240     | 0.0       | 0.5          | 1.0   | 41.7  | 0.986  | 0.986  | 0.494    | 0.0    |
| 44      | 0.0     | 0.625   | 0.312   | 150     | 0.0       | 0.625        | 0.0   | 40.4  | 0.986  | 0.986  | 0.419    | 0.0    |
| 45      | 0.0     | 0.625   | 0.312   | 161     | 0.0       | 0.625        | 0.114 | 40.9  | 0.987  | 0.987  | 0.414    | 0.0    |
| 46      | 0.0     | 0.625   | 0.312   | 173     | 0.0       | 0.625        | 0.239 | 41.6  | 0.988  | 0.988  | 0.412    | 0.0    |
| 47      | 0.0     | 0.625   | 0.312   | 187     | 0.0       | 0.625        | 0.385 | 42.8  | 0.982  | 0.982  | 0.408    | 0.0    |
| 48      | 0.0     | 0.625   | 0.312   | 199     | 0.0       | 0.625        | 0.51  | 43.8  | 0.977  | 0.977  | 0.415    | 0.0    |
| 49      | 0.0     | 0.625   | 0.312   | 210     | 0.0       | 0.625        | 0.625 | 44.6  | 0.972  | 0.972  | 0.422    | 0.0    |
| 50      | 0.0     | 0.625   | 0.312   | 219     | 0.0       | 0.637        | 0.75  | 46.1  | 0.978  | 0.978  | 0.387    | 0.0    |
| 51      | 0.0     | 0.75    | 0.375   | 225     | 0.0       | 0.641        | 0.875 | 46.7  | 0.982  | 0.982  | 0.372    | 0.0    |
| 52      | 0.0     | 0.875   | 0.437   | 226     | 0.0       | 0.633        | 1.0   | 46.8  | 0.988  | 0.988  | 0.368    | 0.0    |
| 53      | 0.0     | 1.0     | 0.5     | 232     | 0.0       | 0.633        | 1.0   | 46.8  | 0.992  | 0.992  | 0.368    | 0.0    |
| 54      | 0.0     | 0.75    | 0.375   | 150     | 0.0       | 0.75         | 0.0   | 43.6  | 0.988  | 0.988  | 0.294    | 0.0    |
| 55      | 0.0     | 0.75    | 0.375   | 159     | 0.0       | 0.75         | 0.112 | 44.1  | 0.991  | 0.991  | 0.286    | 0.0    |
| 56      | 0.0     | 0.75    | 0.375   | 169     | 0.0       | 0.75         | 0.237 | 44.8  | 0.991  | 0.991  | 0.283    | 0.0    |
| 57      | 0.0     | 0.75    | 0.375   | 181     | 0.0       | 0.75         | 0.375 | 45.8  | 0.989  | 0.989  | 0.282    | 0.0    |
| 58      | 0.0     | 0.75    | 0.375   | 190     | 0.0       | 0.75         | 0.512 | 46.9  | 0.987  | 0.987  | 0.282    | 0.0    |
| 59      | 0.0     | 0.75    | 0.375   | 201     | 0.0       | 0.75         | 0.637 | 47.8  | 0.982  | 0.982  | 0.279    | 0.0    |
| 60      | 0.0     | 0.75    | 0.375   | 210     | 0.0       | 0.75         | 0.75  | 48.7  | 0.978  | 0.978  | 0.286    | 0.0    |
| 61      | 0.0     | 0.875   | 0.437   | 218     | 0.0       | 0.766        | 0.875 | 50.2  | 0.987  | 0.987  | 0.251    | 0.0    |
| 62      | 0.0     | 1.0     | 0.5     | 224     | 0.0       | 0.766        | 1.0   | 50.9  | 0.986  | 0.986  | 0.234    | 0.0    |
| 63      | 0.0     | 0.875   | 0.437   | 150     | 0.0       | 0.875        | 0.0   | 46.8  | 0.991  | 0.991  | 0.16     | 0.0    |
| 64      | 0.0     | 0.875   | 0.437   | 158     | 0.0       | 0.875        | 0.116 | 47.3  | 0.994  | 0.994  | 0.157    | 0.0    |
| 65      | 0.0     | 0.875   | 0.437   | 166     | 0.0       | 0.875        | 0.233 | 47.9  | 0.995  | 0.995  | 0.156    | 0.0    |
| 66      | 0.0     | 0.875   | 0.437   | 175     | 0.0       | 0.875        | 0.364 | 48.8  | 0.996  | 0.996  | 0.155    | 0.0    |
| 67      | 0.0     | 0.875   | 0.437   | 185     | 0.0       | 0.875        | 0.51  | 50.1  | 0.995  | 0.995  | 0.153    | 0.0    |
| 68      | 0.0     | 0.875   | 0.437   | 193     | 0.0       | 0.875        | 0.637 | 51.1  | 0.996  | 0.996  | 0.156    | 0.0    |
| 69      | 0.0     | 0.875   | 0.437   | 202     | 0.0       | 0.875        | 0.75  | 51.8  | 0.993  | 0.993  | 0.156    | 0.0    |
| 70      | 0.0     | 0.875   | 0.437   | 207     | 0.0       | 0.875        | 0.875 | 51.8  | 0.991  | 0.991  | 0.156    | 0.0    |
| 71      | 0.0     | 1.0     | 0.5     | 217     | 0.0       | 0.875        | 0.975 | 52.7  | 0.989  | 0.989  | 0.164    | 0.0    |
| 72      | 0.0     | 1.0     | 0.5     | 217     | 0.0       | 0.883        | 1.0   | 53.1  | 0.988  | 0.988  | 0.164    | 0.0    |
| 73      | 0.0     | 1.0     | 0.5     | 217     | 0.0       | 0.883        | 1.0   | 53.1  | 0.988  | 0.988  | 0.164    | 0.0    |
| 74      | 0.0     | 1.0     | 0.5     | 150     | 0.0       | 1.0          | 0.0   | 50.0  | 1.0    | 1.0    | 0.0      | 0.0    |
| 75      | 0.0     | 1.0     | 0.5     | 157     | 0.0       | 1.0          | 0.116 | 50.5  | 0.999  | 0.999  | 0.117    | 0.0    |
| 76      | 0.0     | 1.0     | 0.5     | 164     | 0.0       | 1.0          | 0.116 | 50.5  | 0.999  | 0.999  | 0.117    | 0.0    |
| 77      | 0.0     | 1.0     | 0.5     | 172     | 0.0       | 1.0          | 0.233 | 51.1  | 1.0    | 1.0    | 0.0      | 0.0    |
| 78      | 0.0     | 1.0     | 0.5     | 180     | 0.0       | 1.0          | 0.366 | 51.9  | 0.999  | 0.999  | 0.117    | 0.0    |
| 79      | 0.0     | 1.0     | 0.5     | 188     | 0.0       | 1.0          | 0.5   | 52.9  | 1.0    | 1.0    | 0.0      | 0.0    |
| 80      | 0.0     | 1.0     | 0.5     | 196     | 0.0       | 1.0          | 0.633 | 54.1  | 0.999  | 0.999  | 0.117    | 0.0    |
| 81      | 0.0     | 1.0     | 0.5     | 203     | 0.0       | 1.0          | 0.766 | 55.1  | 0.999  | 0.999  | 0.117    | 0.0    |
| 82      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 0.883 | 55.9  | 0.999  | 0.999  | 0.117    | 0.0    |
| 83      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 84      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 85      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 86      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 87      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 88      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 89      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 90      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 91      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 92      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 93      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 94      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 95      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 96      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 97      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 98      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 99      | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |
| 100     | 0.0     | 1.0     | 0.5     | 210     | 0.0       | 1.0          | 1.0   | 56.8  | 1.0    | 1.0    | 0.0      | 0.0    |

Mean color difference of this page:

0.0

1-1031931-10

QE170-7N, Page 20/33-F

| Responsibility     | Percentage |
|--------------------|------------|
| Current government | 75%        |
| Opposition         | 25%        |

TUB-test chart QE17; hue code: H<sub>d</sub><sup>\*</sup>=R50Y<sub>d</sub>  
colors and differences,  $\Delta E^*$

input: *rgb/cmyk*  $\rightarrow$  *rgb<sub>dd</sub>*  
 output: 3D-linearization to *cmy0\*<sub>dd</sub>*



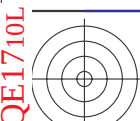
see similar files: <http://130.149.60.45/~farbmatrik/QE17/QE17.HTM>  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>



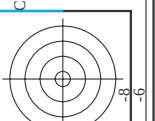






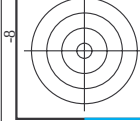
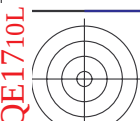


TUB registration: 20130201-QE17/QE17L0FA.TXT /PS TUB material: code=rha4ta  
application for measurement of offset print output, separation cmy0\* (CMY0)



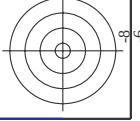
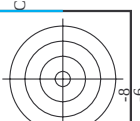
| n   | HC*Fid         | rgb_Fid           | Lab_Fid           | rgb_Fid           | Lab_Fid         | cmyn*sep_Fid      | rgb_Fid     | LabCH*Mid       |
|-----|----------------|-------------------|-------------------|-------------------|-----------------|-------------------|-------------|-----------------|
| 405 | R00Y.062.062ad | 0.625 0.0 0.0     | 0.625 0.625 0.312 | 0.625 0.0 0.0     | 37.5 44.3 28.0  | 0.444 0.936 1.0   | 0.0 0.0 0.0 | 45.4 70.9 83.9  |
| 406 | R01Y.062.062ad | 0.625 0.0 0.125   | 0.625 0.625 0.312 | 0.625 0.0 0.114   | 37.6 44.3 23.4  | 0.445 0.937 0.9   | 0.0 0.0 0.0 | 45.5 71.0 84.0  |
| 407 | R02Y.062.062ad | 0.625 0.0 0.25    | 0.625 0.625 0.312 | 0.625 0.0 0.239   | 37.7 45.6 17.4  | 0.446 0.937 0.85  | 0.0 0.0 0.0 | 45.6 71.1 84.1  |
| 408 | R03Y.062.062ad | 0.625 0.0 0.375   | 0.625 0.625 0.312 | 0.625 0.0 0.365   | 37.8 47.2 9.5   | 0.448 0.937 0.765 | 0.0 0.0 0.0 | 45.8 71.2 84.2  |
| 409 | R04Y.062.062ad | 0.625 0.0 0.5     | 0.625 0.625 0.312 | 0.625 0.0 0.51    | 37.8 48.6 3.9   | 0.451 0.942 0.606 | 0.0 0.0 0.0 | 46.1 71.3 84.3  |
| 410 | R05Y.062.062ad | 0.625 0.0 0.625   | 0.625 0.625 0.312 | 0.625 0.0 0.625   | 37.9 49.5 -0.1  | 0.456 0.941 0.425 | 0.0 0.0 0.0 | 46.6 71.4 84.4  |
| 411 | B00R.062.062ad | 0.625 0.0 0.75    | 0.625 0.625 0.312 | 0.637 0.75 0.39   | 49.5 -0.1 49.5  | 0.459 0.952 0.283 | 0.0 0.0 0.0 | 47.3 71.5 84.5  |
| 412 | B01R.062.062ad | 0.625 0.0 0.875   | 0.625 0.625 0.312 | 0.641 0.0 0.875   | 39.2 61.5 -8.7  | 0.478 0.972 0.144 | 0.0 0.0 0.0 | 48.1 71.6 84.6  |
| 413 | B02R.062.062ad | 0.625 0.0 1.0     | 0.625 0.625 0.312 | 0.633 0.0 1.0     | 38.3 65.8 -13.7 | 0.482 0.987 0.0   | 0.0 0.0 0.0 | 49.0 71.7 84.7  |
| 414 | B03R.062.062ad | 0.625 0.125 0.0   | 0.625 0.625 0.312 | 0.625 0.125 0.0   | 41.1 36.1 32.8  | 0.441 0.827 1.0   | 0.0 0.0 0.0 | 44.2 42.2 40.2  |
| 415 | R00Y.062.050ad | 0.625 0.125 0.125 | 0.625 0.625 0.125 | 0.625 0.125 0.125 | 43.8 35.4 22.4  | 0.413 0.79 0.739  | 0.0 0.0 0.0 | 51.1 57.8 52.5  |
| 416 | R01Y.062.050ad | 0.625 0.125 0.25  | 0.625 0.625 0.125 | 0.625 0.125 0.25  | 43.9 36.0 17.4  | 0.418 0.79 0.659  | 0.0 0.0 0.0 | 45.6 72.1 35.3  |
| 417 | R02Y.062.050ad | 0.625 0.125 0.375 | 0.625 0.625 0.125 | 0.625 0.125 0.375 | 44.0 37.1 10.5  | 0.424 0.792 0.551 | 0.0 0.0 0.0 | 45.9 74.2 21.1  |
| 418 | B01R.062.050ad | 0.625 0.125 0.5   | 0.625 0.625 0.125 | 0.625 0.125 0.5   | 38.5 38.8 5.9   | 0.43 0.798 0.448  | 0.0 0.0 0.0 | 77.1 5.9 8.0    |
| 419 | B00R.062.050ad | 0.625 0.125 0.625 | 0.625 0.625 0.125 | 0.625 0.125 0.625 | 44.1 39.6 -0.1  | 0.433 0.801 0.376 | 0.0 0.0 0.0 | 46.1 79.3 -0.2  |
| 420 | B01R.062.050ad | 0.625 0.125 0.75  | 0.625 0.625 0.125 | 0.625 0.125 0.75  | 44.9 45.8 -4.4  | 0.433 0.801 0.255 | 0.0 0.0 0.0 | 73.6 359.8 73.6 |
| 421 | B02R.062.050ad | 0.625 0.125 0.875 | 0.625 0.625 0.125 | 0.625 0.125 0.875 | 44.8 51.0 -8.9  | 0.433 0.801 0.142 | 0.0 0.0 0.0 | 68.1 -11.9 69.1 |
| 422 | B03R.062.050ad | 0.625 0.125 1.0   | 0.625 0.625 0.125 | 0.625 0.125 1.0   | 44.5 55.3 -14.3 | 0.433 0.801 0.0   | 0.0 0.0 0.0 | 65.3 345.4 65.3 |
| 423 | R00Y.062.050ad | 0.625 0.25 0.0    | 0.625 0.625 0.25  | 0.625 0.25 0.0    | 46.3 24.7 38.2  | 0.414 0.691 0.772 | 0.0 0.0 0.0 | 57.6 74.0 57.6  |
| 424 | R01Y.062.050ad | 0.625 0.25 0.125  | 0.625 0.625 0.25  | 0.625 0.25 0.125  | 47.6 26.7 31.4  | 0.414 0.691 0.772 | 0.0 0.0 0.0 | 57.6 74.0 57.6  |
| 425 | R02Y.062.050ad | 0.625 0.25 0.25   | 0.625 0.625 0.25  | 0.625 0.25 0.25   | 50.1 26.6 16.8  | 0.396 0.655 0.75  | 0.0 0.0 0.0 | 53.4 54.8 76.5  |
| 426 | R03Y.062.050ad | 0.625 0.25 0.375  | 0.625 0.625 0.25  | 0.625 0.25 0.375  | 50.2 27.2 11.7  | 0.402 0.657 0.506 | 0.0 0.0 0.0 | 70.9 44.8 83.9  |
| 427 | B01R.062.037ad | 0.625 0.25 0.5    | 0.625 0.625 0.25  | 0.625 0.25 0.5    | 28.6 4.4 29.7   | 0.402 0.657 0.506 | 0.0 0.0 0.0 | 31.2 79.1 23.2  |
| 428 | B02R.062.037ad | 0.625 0.25 0.625  | 0.625 0.625 0.25  | 0.625 0.25 0.625  | 50.3 29.7 0.0   | 0.411 0.663 0.436 | 0.0 0.0 0.0 | 76.4 11.9 77.3  |
| 429 | B03R.062.037ad | 0.625 0.25 0.75   | 0.625 0.625 0.25  | 0.625 0.25 0.75   | 51.0 35.8 -4.3  | 0.418 0.671 0.330 | 0.0 0.0 0.0 | 79.3 -0.2 79.3  |
| 430 | B04R.062.037ad | 0.625 0.25 0.875  | 0.625 0.625 0.25  | 0.625 0.25 0.875  | 50.6 40.9 -9.0  | 0.372 0.616 0.0   | 0.0 0.0 0.0 | 72.1 333.0 72.1 |
| 431 | B05R.062.037ad | 0.625 0.25 1.0    | 0.625 0.625 0.25  | 0.625 0.25 1.0    | 43.5 46.6 340.5 | 0.348 0.725 0.126 | 0.0 0.0 0.0 | 66.6 347.4 66.6 |
| 432 | R00Y.062.050ad | 0.625 0.375 0.0   | 0.625 0.625 0.375 | 0.625 0.375 0.0   | 53.9 10.4 44.3  | 0.418 0.671 0.330 | 0.0 0.0 0.0 | 72.1 333.0 72.1 |
| 433 | R01Y.062.050ad | 0.625 0.375 0.125 | 0.625 0.625 0.375 | 0.625 0.375 0.125 | 53.9 10.4 44.3  | 0.418 0.671 0.330 | 0.0 0.0 0.0 | 72.1 333.0 72.1 |
| 434 | R02Y.062.050ad | 0.625 0.375 0.25  | 0.625 0.625 0.375 | 0.625 0.375 0.25  | 54.2 17.1 22.2  | 0.418 0.671 0.330 | 0.0 0.0 0.0 | 72.1 333.0 72.1 |
| 435 | R03Y.062.050ad | 0.625 0.375 0.375 | 0.625 0.625 0.375 | 0.625 0.375 0.375 | 56.3 17.7 12.1  | 0.393 0.522 0.456 | 0.0 0.0 0.0 | 74.9 52.2 74.9  |
| 436 | R04Y.062.050ad | 0.625 0.375 0.5   | 0.625 0.625 0.375 | 0.625 0.375 0.5   | 56.4 18.5 5.2   | 0.404 0.525 0.382 | 0.0 0.0 0.0 | 74.9 52.2 74.9  |
| 437 | R05Y.062.050ad | 0.625 0.375 0.625 | 0.625 0.625 0.375 | 0.625 0.375 0.625 | 56.5 19.8 0.0   | 0.411 0.532 0.307 | 0.0 0.0 0.0 | 79.3 359.8 79.3 |
| 438 | B01R.062.037ad | 0.625 0.375 0.75  | 0.625 0.625 0.375 | 0.625 0.375 0.75  | 56.8 25.5 -4.4  | 0.367 0.559 0.211 | 0.0 0.0 0.0 | 68.1 -11.9 69.1 |
| 439 | B02R.062.037ad | 0.625 0.375 1.0   | 0.625 0.625 0.375 | 0.625 0.375 1.0   | 56.4 32.7 -16.0 | 0.357 0.583 0.099 | 0.0 0.0 0.0 | 58.6 -20.7 62.1 |
| 440 | R01Y.062.062ad | 0.625 0.5 0.0     | 0.625 0.625 0.5   | 0.625 0.5 0.0     | 59.7 0.5 54.6   | 0.344 0.604 0.0   | 0.0 0.0 0.0 | 32.9 52.3 25.7  |
| 441 | R02Y.062.062ad | 0.625 0.5 0.125   | 0.625 0.625 0.5   | 0.625 0.5 0.125   | 60.4 2.1 42.3   | 0.394 0.581 0.0   | 0.0 0.0 0.0 | 80.8 8.7 87.3   |
| 442 | R03Y.062.062ad | 0.625 0.5 0.25    | 0.625 0.625 0.5   | 0.625 0.5 0.25    | 61.1 4.1 30.4   | 0.397 0.581 0.0   | 0.0 0.0 0.0 | 84.7 84.8 87.0  |
| 443 | R04Y.062.062ad | 0.625 0.5 0.375   | 0.625 0.625 0.5   | 0.625 0.5 0.375   | 61.2 7.2 17.1   | 0.395 0.415 0.0   | 0.0 0.0 0.0 | 78.6 43.0 78.6  |
| 444 | R05Y.062.062ad | 0.625 0.5 0.5     | 0.625 0.625 0.5   | 0.625 0.5 0.5     | 62.6 8.8 5.6    | 0.399 0.415 0.0   | 0.0 0.0 0.0 | 84.8 87.0 84.8  |
| 445 | R00Y.062.012ad | 0.625 0.5 0.625   | 0.625 0.625 0.5   | 0.625 0.5 0.625   | 10.4 32.3 67.1  | 0.407 0.351 0.0   | 0.0 0.0 0.0 | 64.9 28.9 68.6  |
| 446 | R01Y.062.012ad | 0.625 0.5 0.75    | 0.625 0.625 0.5   | 0.625 0.5 0.75    | 9.9 0.0 9.9     | 0.409 0.41 0.0    | 0.0 0.0 0.0 | 45.4 70.9 44.8  |
| 447 | B01R.062.012ad | 0.625 0.5 0.875   | 0.625 0.625 0.5   | 0.625 0.5 0.875   | 14.6 -5.1 15.5  | 0.429 0.186 0.0   | 0.0 0.0 0.0 | 46.1 79.3 -0.2  |
| 448 | B02R.062.012ad | 0.625 0.5 1.0     | 0.625 0.625 0.5   | 0.625 0.5 1.0     | 17.7 -11.0 20.9 | 0.383 0.445 0.091 | 0.0 0.0 0.0 | 58.6 -20.7 62.1 |
| 449 | B03R.062.012ad | 0.625 0.5 1.0     | 0.625 0.625 0.5   | 0.625 0.5 1.0     | 20.9 32.1 31.1  | 0.379 0.445 0.091 | 0.0 0.0 0.0 | 47.3 -29.4 52.9 |
| 450 | R00Y.062.050ad | 0.625 0.625 0.0   | 0.625 0.625 0.312 | 0.625 0.625 0.0   | 64.0 -6.3 59.6  | 0.401 0.285 0.978 | 0.0 0.0 0.0 | 87.8 -10.2 95.4 |
| 451 | R01Y.062.050ad | 0.625 0.625 0.125 | 0.625 0.625 0.312 | 0.625 0.625 0.125 | 65.0 -5.1 47.7  | 0.391 0.286 0.821 | 0.0 0.0 0.0 | 95.4 96.0 96.1  |
| 452 | R02Y.062.050ad | 0.625 0.625 0.25  | 0.625 0.625 0.312 | 0.625 0.625 0.25  | 65.9 -3.8 35.8  | 0.385 0.282 0.638 | 0.0 0.0 0.0 | 95.4 96.0 96.1  |
| 453 | R03Y.062.050ad | 0.625 0.625 0.375 | 0.625 0.625 0.312 | 0.625 0.625 0.375 | 66.9 -2.5 23.8  | 0.386 0.28 0.538  | 0.0 0.0 0.0 | 95.4 96.0 96.1  |
| 454 | R04Y.062.050ad | 0.625 0.625 0.5   | 0.625 0.625 0.312 | 0.625 0.625 0.5   | 67.9 -1.2 11.9  | 0.397 0.274 0.403 | 0.0 0.0 0.0 | 95.4 96.0 96.1  |
| 455 | R05Y.062.050ad | 0.625 0.625 0.625 | 0.625 0.625 0.312 | 0.625 0.625 0.625 | 68.9 0.0 0.0    | 0.417 0.26 0.0    | 0.0 0.0 0.0 | 95.4 96.0 96.1  |
| 456 | B01R.062.012ad | 0.625 0.625 0.75  | 0.625 0.625 0.312 | 0.625 0.625 0.75  | 68.9 3.6 -5.0   | 0.402 0.285 0.178 | 0.0 0.0 0.0 | 95.4 96.0 96.1  |
| 457 | B02R.062.012ad | 0.625 0.625 0.875 | 0.625 0.625 0.312 | 0.625 0.625 0.875 | 69.0 7.3 -10.1  | 0.387 0.309 0.093 | 0.0 0.0 0.0 | 95.4 96.0 96.1  |
| 458 | B03R.062.012ad | 0.625 0.625 1.0   | 0.625 0.625 0.312 | 0.625 0.625 1.0   | 69.1 11.0 15.5  | 0.376 0.331 0.062 | 0.0 0.0 0.0 | 95.4 96.0 96.1  |
| 459 | R00Y.062.050ad | 0.625 0.75 0.0    | 0.625 0.625 0.75  | 0.625 0.75 0.0    | 68.8 -11.0 66.1 | 0.418 0.671 0.330 | 0.0 0.0 0.0 | 72.1 333.0 72.1 |
| 460 | R01Y.062.050ad | 0.625 0.75 0.125  | 0.625 0.625 0.75  | 0.625 0.75 0.125  | 68.8 -11.0 66.1 | 0.418 0.671 0.330 | 0.0 0.0 0.0 | 72.1 333.0 72.1 |
| 461 | R02Y.062.050ad | 0.625 0.75 0.25   | 0.625 0.625 0.75  | 0.625 0.75 0.25   | 68.8 -11.0 66.1 | 0.418 0.671 0.330 | 0.0 0.0 0.0 | 72.1 333.0 72.1 |
| 462 | R03Y.062.050ad | 0.625 0.75 0.375  | 0.625 0.625 0.75  | 0.625 0.75 0.375  | 68.8 -11.0 66.1 | 0.418 0.671 0.330 | 0.0 0.0 0.0 | 72.1 333.0 72.1 |
| 463 | R04Y.062.050ad | 0.625 0.75 0.5    | 0.625 0.625 0.75  | 0.625 0.75 0.5    | 68.8 -11.0 66.1 | 0.418 0.671 0.330 | 0.0 0.0 0.0 | 72.1 333.0 72.1 |
| 464 | R05Y.062.050ad | 0.625 0.75 0.625  | 0.625 0.625 0.75  | 0.625 0.75 0.625  | 68.8 -11.0 66.1 | 0.418 0.671 0.330 | 0.0 0.0 0.0 | 72.1 333.0 72.1 |
| 465 | B01R.062.037ad | 0.625 0.75 0.75   | 0                 |                   |                 |                   |             |                 |

[illegible]



TUB registration: 20130201-QE17/QE17L0FA.TXT /.PS  
application for measurement of offset print output, separation cmy0\* (CMY0)

TUB material: code=rha4ta

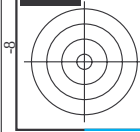
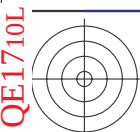


http://130.149.60.45/~farbmatrik/QE17/QE17L0FA.TXT /.PS; 3D-linearization  
F: 3D-linearization QE17/QE17L0FA.DAT in file (F), page 27/33

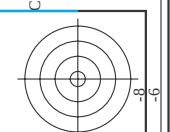
input: rgb/cmyk -> rgbd  
output: 3D-linearization to cmy0\*  
delta

| n   | HIC* <sub>Feld</sub> | rgb_Feld          | ic*_Feld          | hs*_Feld | rgb*_Feld         | LabCh*_Feld | cmyn*_sep_Feld | hsn*_id | rgb*_id       | LabCh*_id | delta |
|-----|----------------------|-------------------|-------------------|----------|-------------------|-------------|----------------|---------|---------------|-----------|-------|
| 567 | R00Y.087.087Ad       | 0.875 0.0 0.0     | 0.875 0.875 0.437 | 390      | 0.875 0.0 0.0     | 42.8 62.0   | 0.171 0.983    | 389     | 1.0 0.0 0.0   | 45.4 70.9 | 32.3  |
| 568 | R36Y.087.087Ad       | 0.875 0.0 0.125   | 0.875 0.875 0.437 | 392      | 0.875 0.0 0.116   | 42.9 62.0   | 0.171 0.983    | 382     | 1.0 0.0 0.133 | 45.5 71.5 | 39.7  |
| 569 | R20Y.087.087Ad       | 0.875 0.0 0.25    | 0.875 0.875 0.437 | 374      | 0.875 0.0 0.233   | 43.1 63.2   | 0.173 0.986    | 375     | 1.0 0.0 0.266 | 45.6 72.3 | 33.8  |
| 570 | R00Y.087.087Ad       | 0.875 0.0 0.375   | 0.875 0.875 0.437 | 365      | 0.875 0.0 0.364   | 43.2 64.2   | 0.173 0.984    | 365     | 1.0 0.0 0.416 | 45.8 73.4 | 25.9  |
| 571 | B70R.087.087Ad       | 0.875 0.0 0.5     | 0.875 0.875 0.437 | 355      | 0.875 0.0 0.51    | 43.2 65.8   | 0.174 0.982    | 354     | 1.0 0.0 0.583 | 45.9 75.2 | 16.9  |
| 572 | B63R.087.087Ad       | 0.875 0.0 0.625   | 0.875 0.875 0.437 | 346      | 0.875 0.0 0.641   | 43.2 67.3   | 0.176 0.986    | 344     | 1.0 0.0 0.733 | 45.9 77.0 | 9.4   |
| 573 | B56R.087.087Ad       | 0.875 0.0 0.75    | 0.875 0.875 0.437 | 338      | 0.875 0.0 0.758   | 43.2 68.4   | 0.179 0.985    | 337     | 1.0 0.0 0.866 | 45.9 78.1 | 4.4   |
| 574 | B50R.087.087Ad       | 0.875 0.0 0.875   | 0.875 0.875 0.437 | 330      | 0.875 0.0 0.875   | 43.4 69.4   | 0.182 0.984    | 330     | 1.0 0.0 1.0   | 46.1 79.3 | -0.2  |
| 575 | B44R.100.100Ad       | 0.875 0.0 1.0     | 0.875 0.875 0.437 | 323      | 0.883 0.0 1.0     | 44.3 75.4   | 0.185 0.985    | 323     | 1.0 0.0 1.0   | 46.3 79.3 | -0.2  |
| 576 | R13Y.087.087Ad       | 0.875 0.125 0.0   | 0.875 0.875 0.437 | 38       | 0.875 0.116 0.0   | 46.1 54.3   | 0.172 0.981    | 37      | 1.0 0.133     | 44.2 62.1 | 49.8  |
| 577 | R00Y.087.075Ad       | 0.875 0.125 0.125 | 0.875 0.875 0.437 | 390      | 0.875 0.125 0.125 | 49.1 53.2   | 0.172 0.981    | 389     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 578 | R35Y.087.075Ad       | 0.875 0.125 0.25  | 0.875 0.875 0.437 | 381      | 0.875 0.125 0.237 | 49.1 53.2   | 0.172 0.981    | 382     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 579 | R18Y.087.075Ad       | 0.875 0.125 0.375 | 0.875 0.875 0.437 | 371      | 0.875 0.125 0.362 | 49.1 54.5   | 0.172 0.981    | 369     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 580 | R00Y.087.075Ad       | 0.875 0.125 0.5   | 0.875 0.875 0.437 | 360      | 0.875 0.125 0.494 | 54.6 55.6   | 0.172 0.981    | 360     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 581 | B65R.087.075Ad       | 0.875 0.125 0.625 | 0.875 0.875 0.437 | 355      | 0.875 0.125 0.637 | 49.4 57.3   | 0.172 0.981    | 348     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 582 | B57R.087.075Ad       | 0.875 0.125 0.75  | 0.875 0.875 0.437 | 349      | 0.875 0.125 0.762 | 49.4 58.3   | 0.172 0.981    | 337     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 583 | B50R.087.075Ad       | 0.875 0.125 0.875 | 0.875 0.875 0.437 | 340      | 0.875 0.125 0.875 | 49.5 59.4   | 0.172 0.981    | 330     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 584 | B43R.100.087Ad       | 0.875 0.125 1.0   | 0.875 0.875 0.437 | 322      | 0.883 0.125 1.0   | 50.5 65.5   | 0.172 0.981    | 322     | 1.0 0.0 1.0   | 46.1 79.3 | -0.2  |
| 585 | R26Y.087.075Ad       | 0.875 0.25 0.0    | 0.875 0.875 0.437 | 46       | 0.875 0.233 0.0   | 44.1 48.4   | 0.172 0.981    | 44      | 1.0 0.266     | 50.4 50.4 | 56.5  |
| 586 | R15Y.087.075Ad       | 0.875 0.25 0.125  | 0.875 0.875 0.437 | 39       | 0.875 0.237 0.125 | 52.4 45.5   | 0.172 0.981    | 39      | 1.0 0.15      | 50.4 50.4 | 56.5  |
| 587 | R00Y.087.062Ad       | 0.875 0.25 0.25   | 0.875 0.875 0.437 | 390      | 0.875 0.25 0.25   | 53.4 46.6   | 0.172 0.981    | 389     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 588 | R00Y.087.062Ad       | 0.875 0.25 0.375  | 0.875 0.875 0.437 | 381      | 0.875 0.25 0.362  | 53.4 47.7   | 0.172 0.981    | 381     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 589 | R11Y.087.062Ad       | 0.875 0.25 0.5    | 0.875 0.875 0.437 | 367      | 0.875 0.25 0.484  | 54.6 55.6   | 0.172 0.981    | 367     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 590 | B69R.087.062Ad       | 0.875 0.25 0.625  | 0.875 0.875 0.437 | 353      | 0.875 0.25 0.636  | 55.7 47.2   | 0.172 0.981    | 352     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 591 | B59R.087.062Ad       | 0.875 0.25 0.75   | 0.875 0.875 0.437 | 341      | 0.875 0.25 0.75   | 55.6 48.6   | 0.172 0.981    | 339     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 592 | B50R.087.062Ad       | 0.875 0.25 0.875  | 0.875 0.875 0.437 | 330      | 0.875 0.25 0.875  | 55.7 49.5   | 0.172 0.981    | 330     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 593 | B42R.100.062Ad       | 0.875 0.25 1.0    | 0.875 0.875 0.437 | 321      | 0.887 0.25 1.0    | 56.7 55.7   | 0.172 0.981    | 322     | 1.0 0.0 1.0   | 46.1 79.3 | -0.2  |
| 594 | R31Y.087.075Ad       | 0.875 0.375 0.0   | 0.875 0.875 0.437 | 55       | 0.875 0.362 0.0   | 57.4 34.3   | 0.172 0.981    | 54      | 1.0 0.416     | 60.4 60.4 | 74.6  |
| 595 | R11Y.087.075Ad       | 0.875 0.375 0.125 | 0.875 0.875 0.437 | 55       | 0.875 0.362 0.125 | 57.4 34.3   | 0.172 0.981    | 54      | 1.0 0.416     | 60.4 60.4 | 74.6  |
| 596 | R00Y.087.062Ad       | 0.875 0.375 0.25  | 0.875 0.875 0.437 | 40       | 0.875 0.362 0.25  | 58.9 36.1   | 0.172 0.981    | 48      | 1.0 0.316     | 60.4 60.4 | 74.6  |
| 597 | R00Y.087.050Ad       | 0.875 0.375 0.375 | 0.875 0.875 0.437 | 391      | 0.875 0.375 0.375 | 61.6 35.4   | 0.172 0.981    | 39      | 1.0 0.183     | 60.4 60.4 | 74.6  |
| 598 | R26Y.087.050Ad       | 0.875 0.375 0.5   | 0.875 0.875 0.437 | 376      | 0.875 0.375 0.491 | 61.7 36.0   | 0.172 0.981    | 389     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 599 | R00Y.087.050Ad       | 0.875 0.375 0.625 | 0.875 0.875 0.437 | 360      | 0.875 0.375 0.625 | 61.8 37.1   | 0.172 0.981    | 360     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 600 | B61R.087.050Ad       | 0.875 0.375 0.75  | 0.875 0.875 0.437 | 344      | 0.875 0.375 0.758 | 61.8 38.6   | 0.172 0.981    | 342     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 601 | B50R.087.050Ad       | 0.875 0.375 0.875 | 0.875 0.875 0.437 | 330      | 0.875 0.375 0.875 | 61.9 39.6   | 0.172 0.981    | 330     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 602 | B40R.100.062Ad       | 0.875 0.375 1.0   | 0.875 0.875 0.437 | 319      | 0.885 0.375 1.0   | 62.8 45.8   | 0.172 0.981    | 320     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 603 | R38Y.087.087Ad       | 0.875 0.5 0.0     | 0.875 0.875 0.437 | 65       | 0.875 0.51 0.0    | 64.0 17.7   | 0.172 0.981    | 65      | 1.0 0.583     | 70.2 70.2 | 73.6  |
| 604 | R50Y.087.062Ad       | 0.875 0.5 0.125   | 0.875 0.875 0.437 | 60       | 0.875 0.5 0.125   | 63.6 21.6   | 0.172 0.981    | 59      | 1.0 0.5       | 69.7 69.7 | 67.1  |
| 605 | R38Y.087.062Ad       | 0.875 0.5 0.25    | 0.875 0.875 0.437 | 53       | 0.875 0.489 0.25  | 64.1 24.7   | 0.172 0.981    | 52      | 1.0 0.383     | 69.7 69.7 | 67.1  |
| 606 | R23Y.087.050Ad       | 0.875 0.5 0.375   | 0.875 0.875 0.437 | 44       | 0.875 0.491 0.375 | 65.4 26.7   | 0.172 0.981    | 42      | 1.0 0.233     | 69.7 69.7 | 67.1  |
| 607 | R00Y.087.037Ad       | 0.875 0.5 0.5     | 0.875 0.875 0.437 | 390      | 0.875 0.5 0.5     | 67.9 26.6   | 0.172 0.981    | 389     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 608 | R18Y.087.037Ad       | 0.875 0.5 0.625   | 0.875 0.875 0.437 | 371      | 0.875 0.5 0.618   | 68.0 27.2   | 0.172 0.981    | 371     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 609 | B65R.087.037Ad       | 0.875 0.5 0.75    | 0.875 0.875 0.437 | 349      | 0.875 0.5 0.756   | 68.1 28.6   | 0.172 0.981    | 348     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 610 | B50R.087.037Ad       | 0.875 0.5 0.875   | 0.875 0.875 0.437 | 330      | 0.875 0.5 0.875   | 68.1 29.7   | 0.172 0.981    | 330     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 611 | B38R.100.050Ad       | 0.875 0.5 1.0     | 0.875 0.875 0.437 | 316      | 0.883 0.5 1.0     | 68.8 35.8   | 0.172 0.981    | 317     | 1.0 0.766     | 70.2 70.2 | 73.6  |
| 612 | R73Y.087.087Ad       | 0.875 0.625 0.0   | 0.875 0.875 0.437 | 74       | 0.875 0.641 0.0   | 70.5 6.0    | 0.172 0.981    | 71      | 1.0 0.733     | 70.2 70.2 | 73.6  |
| 613 | R68Y.087.075Ad       | 0.875 0.625 0.125 | 0.875 0.875 0.437 | 71       | 0.875 0.637 0.125 | 71.1 8.2    | 0.172 0.981    | 70      | 1.0 0.683     | 70.2 70.2 | 73.6  |
| 614 | R61Y.087.062Ad       | 0.875 0.625 0.25  | 0.875 0.875 0.437 | 60       | 0.875 0.635 0.25  | 71.7 10.2   | 0.172 0.981    | 67      | 1.0 0.616     | 70.2 70.2 | 73.6  |
| 615 | R50Y.087.050Ad       | 0.875 0.625 0.375 | 0.875 0.875 0.437 | 67       | 0.875 0.635 0.375 | 71.3 14.4   | 0.172 0.981    | 59      | 1.0 0.5       | 69.7 69.7 | 67.1  |
| 616 | R31Y.087.037Ad       | 0.875 0.625 0.5   | 0.875 0.875 0.437 | 49       | 0.875 0.618 0.5   | 72.0 17.1   | 0.172 0.981    | 48      | 1.0 0.316     | 69.7 69.7 | 67.1  |
| 617 | R00Y.087.025Ad       | 0.875 0.625 0.625 | 0.875 0.875 0.437 | 390      | 0.875 0.625 0.625 | 74.1 17.7   | 0.172 0.981    | 389     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 618 | R00Y.087.025Ad       | 0.875 0.625 0.75  | 0.875 0.875 0.437 | 360      | 0.875 0.625 0.75  | 74.2 18.5   | 0.172 0.981    | 360     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 619 | B50R.087.025Ad       | 0.875 0.625 0.875 | 0.875 0.875 0.437 | 330      | 0.875 0.625 0.875 | 74.3 19.8   | 0.172 0.981    | 330     | 1.0 0.0 0.0   | 45.4 70.9 | 44.8  |
| 620 | B44R.100.037Ad       | 0.875 0.625 1.0   | 0.875 0.875 0.437 | 311      | 0.881 0.625 1.0   | 74.7 25.5   | 0.172 0.981    | 311     | 1.0 0.683     | 70.2 70.2 | 73.6  |
| 621 | R86Y.087.087Ad       | 0.875 0.75 0.0    | 0.875 0.875 0.437 | 82       | 0.875 0.758 0.0   | 76.7 2.4    | 0.172 0.981    | 82      | 1.0 0.866     | 80.8 80.8 | 91.7  |
| 622 | R85Y.087.087Ad       | 0.875 0.75 0.125  | 0.875 0.875 0.437 | 81       | 0.875 0.762 0.125 | 76.7 3.1    | 0.172 0.981    | 81      | 1.0 0.85      | 80.8 80.8 | 91.7  |
| 623 | R31Y.087.062Ad       | 0.875 0.75 0.25   | 0.875 0.875 0.437 | 79       | 0.875 0.76 0.25   | 77.5 0.5    | 0.172 0.981    | 77      | 1.0 0.866     | 80.8 80.8 | 91.7  |
| 624 | R61Y.087.050Ad       | 0.875 0.75 0.375  | 0.875 0.875 0.437 | 76       | 0.875 0.7         |             |                |         |               |           |       |

http://130.149.60.45/~farbmatrik/QE17/QE17L0FA.TXT /PS; 3D-linearization  
F: 3D-linearization QE17/QE17L0FA.DAT in file (F), page 28/33



TUB registration: 20130201-QE17/QE17L0FA.TXT /PS  
TUB material: code=rha4ta  
application for measurement of offset print output, separation cmy0\* (CMY0)



| n   | HC*Fid         | rgb_Fid | icr_Fid | hsa_Fid | rgb*Fid | LabCH*Fid | cmyn*sep_Fid | rgb*Mid | hsa_Mid | LabCH*Mid | delta |
|-----|----------------|---------|---------|---------|---------|-----------|--------------|---------|---------|-----------|-------|
| 648 | R00Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 45.4      | 70.9         | 44.8    | 83.9    | 32.3      | 0.0   |
| 649 | R38Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 45.5      | 71.4         | 40.4    | 82.1    | 29.5      | 0.0   |
| 650 | R16Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 45.6      | 72.1         | 35.3    | 80.3    | 26.1      | 0.0   |
| 651 | R23Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 45.7      | 72.9         | 28.7    | 78.4    | 21.5      | 0.0   |
| 652 | R00Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 45.9      | 74.2         | 21.1    | 77.1    | 15.9      | 0.0   |
| 653 | B68R_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 46.0      | 75.7         | 14.4    | 77.1    | 10.8      | 0.0   |
| 654 | B61R_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 46.1      | 77.3         | 8.0     | 77.7    | 5.9       | 0.0   |
| 655 | B55R_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 46.2      | 79.8         | 3.8     | 78.4    | 2.8       | 0.0   |
| 656 | B50R_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 46.3      | 82.3         | 0.0     | 80.2    | 0.0       | 0.0   |
| 657 | R11Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 46.4      | 84.8         | 0.0     | 82.3    | 0.0       | 0.0   |
| 658 | R00Y_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 46.5      | 87.3         | 0.0     | 84.8    | 0.0       | 0.0   |
| 659 | R36Y_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 46.6      | 90.0         | 0.0     | 87.3    | 0.0       | 0.0   |
| 660 | R23Y_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 46.7      | 92.7         | 0.0     | 90.0    | 0.0       | 0.0   |
| 661 | R00Y_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 46.8      | 95.4         | 0.0     | 92.7    | 0.0       | 0.0   |
| 662 | B70R_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 46.9      | 98.1         | 0.0     | 95.4    | 0.0       | 0.0   |
| 663 | B63R_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 47.0      | 100.8        | 0.0     | 98.1    | 0.0       | 0.0   |
| 664 | B56R_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 47.1      | 103.5        | 0.0     | 100.8   | 0.0       | 0.0   |
| 665 | B50R_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 47.2      | 106.2        | 0.0     | 103.5   | 0.0       | 0.0   |
| 666 | R23Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 47.3      | 108.9        | 0.0     | 106.2   | 0.0       | 0.0   |
| 667 | R13Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 47.4      | 111.6        | 0.0     | 108.9   | 0.0       | 0.0   |
| 668 | R00Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 47.5      | 114.3        | 0.0     | 111.6   | 0.0       | 0.0   |
| 669 | R33Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 47.6      | 117.0        | 0.0     | 114.3   | 0.0       | 0.0   |
| 670 | R18Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 47.7      | 119.7        | 0.0     | 117.0   | 0.0       | 0.0   |
| 671 | R00Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 47.8      | 122.4        | 0.0     | 119.7   | 0.0       | 0.0   |
| 672 | B63R_100_075ad | 1.0     | 0.0     | 0.0     | 0.0     | 47.9      | 125.1        | 0.0     | 122.4   | 0.0       | 0.0   |
| 673 | B56R_100_075ad | 1.0     | 0.0     | 0.0     | 0.0     | 48.0      | 127.8        | 0.0     | 125.1   | 0.0       | 0.0   |
| 674 | B50R_100_075ad | 1.0     | 0.0     | 0.0     | 0.0     | 48.1      | 130.5        | 0.0     | 127.8   | 0.0       | 0.0   |
| 675 | R36Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 48.2      | 133.2        | 0.0     | 130.5   | 0.0       | 0.0   |
| 676 | R23Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 48.3      | 135.9        | 0.0     | 133.2   | 0.0       | 0.0   |
| 677 | R13Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 48.4      | 138.6        | 0.0     | 135.9   | 0.0       | 0.0   |
| 678 | R00Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 48.5      | 141.3        | 0.0     | 138.6   | 0.0       | 0.0   |
| 679 | R31Y_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 48.6      | 144.0        | 0.0     | 141.3   | 0.0       | 0.0   |
| 680 | R18Y_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 48.7      | 146.7        | 0.0     | 144.0   | 0.0       | 0.0   |
| 681 | B69R_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 48.8      | 149.4        | 0.0     | 146.7   | 0.0       | 0.0   |
| 682 | B59R_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 48.9      | 152.1        | 0.0     | 149.4   | 0.0       | 0.0   |
| 683 | B50Y_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 49.0      | 154.8        | 0.0     | 152.1   | 0.0       | 0.0   |
| 684 | R50Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 49.1      | 157.5        | 0.0     | 154.8   | 0.0       | 0.0   |
| 685 | R41Y_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 49.2      | 160.2        | 0.0     | 157.5   | 0.0       | 0.0   |
| 686 | R31Y_100_075ad | 1.0     | 0.0     | 0.0     | 0.0     | 49.3      | 162.9        | 0.0     | 160.2   | 0.0       | 0.0   |
| 687 | R18Y_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 49.4      | 165.6        | 0.0     | 162.9   | 0.0       | 0.0   |
| 688 | R00Y_100_050ad | 1.0     | 0.0     | 0.0     | 0.0     | 49.5      | 168.3        | 0.0     | 165.6   | 0.0       | 0.0   |
| 689 | R26Y_100_050ad | 1.0     | 0.0     | 0.0     | 0.0     | 49.6      | 171.0        | 0.0     | 168.3   | 0.0       | 0.0   |
| 690 | R00Y_100_050ad | 1.0     | 0.0     | 0.0     | 0.0     | 49.7      | 173.7        | 0.0     | 171.0   | 0.0       | 0.0   |
| 691 | B61R_100_050ad | 1.0     | 0.0     | 0.0     | 0.0     | 49.8      | 176.4        | 0.0     | 173.7   | 0.0       | 0.0   |
| 692 | B50R_100_050ad | 1.0     | 0.0     | 0.0     | 0.0     | 49.9      | 179.1        | 0.0     | 176.4   | 0.0       | 0.0   |
| 693 | R63Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 50.0      | 181.8        | 0.0     | 179.1   | 0.0       | 0.0   |
| 694 | R38Y_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 50.1      | 184.5        | 0.0     | 181.8   | 0.0       | 0.0   |
| 695 | R26Y_100_075ad | 1.0     | 0.0     | 0.0     | 0.0     | 50.2      | 187.2        | 0.0     | 184.5   | 0.0       | 0.0   |
| 696 | R13Y_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 50.3      | 189.9        | 0.0     | 187.2   | 0.0       | 0.0   |
| 697 | R00Y_100_050ad | 1.0     | 0.0     | 0.0     | 0.0     | 50.4      | 192.6        | 0.0     | 189.9   | 0.0       | 0.0   |
| 698 | R00Y_100_037ad | 1.0     | 0.0     | 0.0     | 0.0     | 50.5      | 195.3        | 0.0     | 192.6   | 0.0       | 0.0   |
| 699 | R18Y_100_037ad | 1.0     | 0.0     | 0.0     | 0.0     | 50.6      | 198.0        | 0.0     | 195.3   | 0.0       | 0.0   |
| 700 | B63R_100_037ad | 1.0     | 0.0     | 0.0     | 0.0     | 50.7      | 200.7        | 0.0     | 198.0   | 0.0       | 0.0   |
| 701 | B50R_100_037ad | 1.0     | 0.0     | 0.0     | 0.0     | 50.8      | 203.4        | 0.0     | 200.7   | 0.0       | 0.0   |
| 702 | R76Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 50.9      | 206.1        | 0.0     | 203.4   | 0.0       | 0.0   |
| 703 | R33Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 51.0      | 208.8        | 0.0     | 206.1   | 0.0       | 0.0   |
| 704 | R18Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 51.1      | 211.5        | 0.0     | 208.8   | 0.0       | 0.0   |
| 705 | B50Y_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 51.2      | 214.2        | 0.0     | 211.5   | 0.0       | 0.0   |
| 706 | B50Y_100_050ad | 1.0     | 0.0     | 0.0     | 0.0     | 51.3      | 216.9        | 0.0     | 214.2   | 0.0       | 0.0   |
| 707 | R31Y_100_037ad | 1.0     | 0.0     | 0.0     | 0.0     | 51.4      | 219.6        | 0.0     | 216.9   | 0.0       | 0.0   |
| 708 | R00Y_100_025ad | 1.0     | 0.0     | 0.0     | 0.0     | 51.5      | 222.3        | 0.0     | 219.6   | 0.0       | 0.0   |
| 709 | R00Y_100_025ad | 1.0     | 0.0     | 0.0     | 0.0     | 51.6      | 225.0        | 0.0     | 222.3   | 0.0       | 0.0   |
| 710 | B50R_100_025ad | 1.0     | 0.0     | 0.0     | 0.0     | 51.7      | 227.7        | 0.0     | 225.0   | 0.0       | 0.0   |
| 711 | R88Y_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 51.8      | 230.4        | 0.0     | 227.7   | 0.0       | 0.0   |
| 712 | R85Y_100_097ad | 1.0     | 0.0     | 0.0     | 0.0     | 51.9      | 233.1        | 0.0     | 230.4   | 0.0       | 0.0   |
| 713 | R85Y_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 52.0      | 235.8        | 0.0     | 233.1   | 0.0       | 0.0   |
| 714 | R81Y_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 52.1      | 238.5        | 0.0     | 235.8   | 0.0       | 0.0   |
| 715 | R76Y_100_050ad | 1.0     | 0.0     | 0.0     | 0.0     | 52.2      | 241.2        | 0.0     | 238.5   | 0.0       | 0.0   |
| 716 | R85Y_100_037ad | 1.0     | 0.0     | 0.0     | 0.0     | 52.3      | 243.9        | 0.0     | 241.2   | 0.0       | 0.0   |
| 717 | R85Y_100_025ad | 1.0     | 0.0     | 0.0     | 0.0     | 52.4      | 246.6        | 0.0     | 243.9   | 0.0       | 0.0   |
| 718 | R00Y_100_012ad | 1.0     | 0.0     | 0.0     | 0.0     | 52.5      | 249.3        | 0.0     | 246.6   | 0.0       | 0.0   |
| 719 | B50R_100_012ad | 1.0     | 0.0     | 0.0     | 0.0     | 52.6      | 252.0        | 0.0     | 249.3   | 0.0       | 0.0   |
| 720 | Y00C_100_100ad | 1.0     | 0.0     | 0.0     | 0.0     | 52.7      | 254.7        | 0.0     | 252.0   | 0.0       | 0.0   |
| 721 | Y00C_100_087ad | 1.0     | 0.0     | 0.0     | 0.0     | 52.8      | 257.4        | 0.0     | 254.7   | 0.0       | 0.0   |
| 722 | Y00C_100_075ad | 1.0     | 0.0     | 0.0     | 0.0     | 52.9      | 260.1        | 0.0     | 257.4   | 0.0       | 0.0   |
| 723 | Y00C_100_062ad | 1.0     | 0.0     | 0.0     | 0.0     | 53.0      | 262.8        | 0.0     | 260.1   | 0.0       | 0.0   |
| 724 | Y00C_100_050ad | 1.0     | 0.0     | 0.0     | 0.0     | 53.1      | 265.5        | 0.0     | 262.8   | 0.0       | 0.0   |
| 725 | Y00C_100_037ad | 1.0     | 0.0     | 0.0     | 0.0     | 53.2      | 268.2        | 0.0     | 265.5   | 0.0       | 0.0   |
| 726 | Y00C_100_025ad | 1.0     | 0.0     | 0.0     | 0.0     | 53.3      | 270.9        | 0.0     | 268.2   | 0.0       | 0.0   |
| 727 | Y00C_100_012ad | 1.0     | 0.0     | 0.0     | 0.0     | 53.4      | 273.6        | 0.0     | 270.9   | 0.0       | 0.0   |
| 728 | NW_100ad       | 1.0     | 0.0     | 0.0     | 0.0     | 53.5      | 276.3        | 0.0     | 273.6   | 0.0       | 0.0   |

input: *rgb/cmyk* -> *rgbd*  
output: 3D-linearization to *cmy0\**dd

TUB-test chart QE17; hue code: H\*d=R50Yd  
colors and differences, ΔE\*

1-1032731-F0

TUB registration: 20130201-QE17/QE17L0FA.TXT /.PS TUB material: code=rha4ta  
application for measurement of offset print output, separation cmy0\* (CMY0)

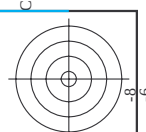
http://130.149.60.45/~farbmatrik/QE17/QE17L0FA.TXT /.PS; 3D-linearization  
F: 3D-linearization QE17/QE17L0FA.DAT in file (F), page 29/33

| n   | HC*Fid         | rgb_Fid       | icd_Fid     | hsa_Fid     | rgb*Fid       | LabC*Fid         | cmyn*sep_Fid      | hax_id | rgb*id      | LabC*Mid         | delta |
|-----|----------------|---------------|-------------|-------------|---------------|------------------|-------------------|--------|-------------|------------------|-------|
| 729 | NW_1000ad      | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 95.6 -3.1 0.0    | 0.0 0.0 0.0       | 360    | 1.0 1.0 1.0 | 95.6 0.0 0.0     | 0.0   |
| 730 | G50B_100.012ad | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 90.7 -3.1 0.0    | 0.167 0.007 0.001 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 731 | G50B_100.025ad | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 85.9 -6.3 0.0    | 0.303 0.007 0.000 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 732 | G50B_100.037ad | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 81.0 -9.5 0.0    | 0.425 0.007 0.000 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 733 | G50B_100.050ad | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 76.2 -12.7 0.0   | 0.556 0.007 0.001 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 734 | G50B_100.062ad | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 71.3 -15.9 0.0   | 0.664 0.002 0.000 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 735 | G50B_100.075ad | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 66.5 -19.1 0.0   | 0.75 0.0 0.0      | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 736 | G50B_100.087ad | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 61.6 -22.3 0.0   | 0.886 0.0 0.0     | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 737 | G50B_100.100ad | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 56.8 -25.5 -41.5 | 1.0 0.0 0.0       | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 738 | ROY_100.012ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 89.3 8.8 0.0     | 0.158 0.088 0.0   | 389    | 1.0 0.0 0.0 | 45.4 70.9 44.8   | 83.9  |
| 739 | ROY_100.025ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 84.7 0.0 0.0     | 0.162 0.101 0.093 | 360    | 1.0 1.0 1.0 | 95.6 0.0 0.0     | 0.0   |
| 740 | ROY_100.037ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 79.8 0.0 0.0     | 0.299 0.104 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 741 | ROY_100.050ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 75.0 0.0 0.0     | 0.418 0.111 0.086 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 742 | ROY_100.062ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 70.1 0.0 0.0     | 0.545 0.123 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 743 | ROY_100.075ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 65.2 0.0 0.0     | 0.656 0.127 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 744 | ROY_100.087ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 60.3 0.0 0.0     | 0.741 0.131 0.083 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 745 | ROY_100.100ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 55.4 0.0 0.0     | 0.879 0.148 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 746 | ROY_100.012ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 50.7 0.0 0.0     | 0.99 0.164 0.081  | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 747 | ROY_100.025ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 45.9 0.0 0.0     | 1.181 0.281 0.181 | 389    | 1.0 0.0 0.0 | 45.4 70.9 44.8   | 83.9  |
| 748 | ROY_100.037ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 41.2 0.0 0.0     | 1.127 0.288 0.181 | 360    | 1.0 1.0 1.0 | 95.6 0.0 0.0     | 0.0   |
| 749 | ROY_100.050ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 36.5 0.0 0.0     | 0.299 0.104 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 750 | ROY_100.062ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 31.8 0.0 0.0     | 0.418 0.111 0.086 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 751 | ROY_100.075ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 26.9 0.0 0.0     | 0.545 0.123 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 752 | ROY_100.087ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 22.0 0.0 0.0     | 0.656 0.127 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 753 | ROY_100.100ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 17.1 0.0 0.0     | 0.741 0.131 0.083 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 754 | ROY_100.012ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 12.2 0.0 0.0     | 0.879 0.148 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 755 | ROY_100.025ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 7.3 0.0 0.0      | 0.99 0.164 0.081  | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 756 | ROY_100.037ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | 2.4 0.0 0.0      | 1.181 0.281 0.181 | 389    | 1.0 0.0 0.0 | 45.4 70.9 44.8   | 83.9  |
| 757 | ROY_100.050ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -2.5 0.0 0.0     | 1.127 0.288 0.181 | 360    | 1.0 1.0 1.0 | 95.6 0.0 0.0     | 0.0   |
| 758 | ROY_100.062ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -7.6 0.0 0.0     | 0.299 0.104 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 759 | ROY_100.075ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -12.7 0.0 0.0    | 0.418 0.111 0.086 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 760 | ROY_100.087ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -17.8 0.0 0.0    | 0.545 0.123 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 761 | ROY_100.100ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -22.9 0.0 0.0    | 0.656 0.127 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 762 | ROY_100.012ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -28.0 0.0 0.0    | 0.741 0.131 0.083 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 763 | ROY_100.025ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -33.1 0.0 0.0    | 0.879 0.148 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 764 | ROY_100.037ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -38.2 0.0 0.0    | 0.99 0.164 0.081  | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 765 | ROY_100.050ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -43.3 0.0 0.0    | 1.181 0.281 0.181 | 389    | 1.0 0.0 0.0 | 45.4 70.9 44.8   | 83.9  |
| 766 | ROY_100.062ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -48.4 0.0 0.0    | 1.127 0.288 0.181 | 360    | 1.0 1.0 1.0 | 95.6 0.0 0.0     | 0.0   |
| 767 | ROY_100.075ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -53.5 0.0 0.0    | 0.299 0.104 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 768 | ROY_100.087ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -58.6 0.0 0.0    | 0.418 0.111 0.086 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 769 | ROY_100.100ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -63.7 0.0 0.0    | 0.545 0.123 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 770 | ROY_100.012ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -68.8 0.0 0.0    | 0.656 0.127 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 771 | ROY_100.025ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -73.9 0.0 0.0    | 0.741 0.131 0.083 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 772 | ROY_100.037ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -79.0 0.0 0.0    | 0.879 0.148 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 773 | ROY_100.050ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -84.1 0.0 0.0    | 0.99 0.164 0.081  | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 774 | ROY_100.062ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -89.2 0.0 0.0    | 1.181 0.281 0.181 | 389    | 1.0 0.0 0.0 | 45.4 70.9 44.8   | 83.9  |
| 775 | ROY_100.075ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -94.3 0.0 0.0    | 1.127 0.288 0.181 | 360    | 1.0 1.0 1.0 | 95.6 0.0 0.0     | 0.0   |
| 776 | ROY_100.087ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -99.4 0.0 0.0    | 0.299 0.104 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 777 | ROY_100.100ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -104.5 0.0 0.0   | 0.418 0.111 0.086 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 778 | ROY_100.012ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -109.6 0.0 0.0   | 0.545 0.123 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 779 | ROY_100.025ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -114.7 0.0 0.0   | 0.656 0.127 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 780 | ROY_100.037ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -119.8 0.0 0.0   | 0.741 0.131 0.083 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 781 | ROY_100.050ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -124.9 0.0 0.0   | 0.879 0.148 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 782 | ROY_100.062ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -130.0 0.0 0.0   | 0.99 0.164 0.081  | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 783 | ROY_100.075ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -135.1 0.0 0.0   | 1.181 0.281 0.181 | 389    | 1.0 0.0 0.0 | 45.4 70.9 44.8   | 83.9  |
| 784 | ROY_100.087ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -140.2 0.0 0.0   | 1.127 0.288 0.181 | 360    | 1.0 1.0 1.0 | 95.6 0.0 0.0     | 0.0   |
| 785 | ROY_100.100ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -145.3 0.0 0.0   | 0.299 0.104 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 786 | ROY_100.012ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -150.4 0.0 0.0   | 0.418 0.111 0.086 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 787 | ROY_100.025ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -155.5 0.0 0.0   | 0.545 0.123 0.088 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 788 | ROY_100.037ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -160.6 0.0 0.0   | 0.656 0.127 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 789 | ROY_100.050ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -165.7 0.0 0.0   | 0.741 0.131 0.083 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 790 | ROY_100.062ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -170.8 0.0 0.0   | 0.879 0.148 0.085 | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 791 | ROY_100.075ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -175.9 0.0 0.0   | 0.99 0.164 0.081  | 210    | 1.0 1.0 1.0 | 56.8 -25.5 -41.5 | 48.7  |
| 792 | ROY_100.087ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -181.0 0.0 0.0   | 1.181 0.281 0.181 | 389    | 1.0 0.0 0.0 | 45.4 70.9 44.8   | 83.9  |
| 793 | ROY_100.100ad  | 0.875 1.0 1.0 | 1.0 1.0 1.0 | 1.0 1.0 1.0 | 0.875 1.0 1.0 | -186.1 0.        |                   |        |             |                  |       |



TUB registration: 20130201-QE17/QE17L0FA.TXT /.PS  
- application for measurement of offset print output, separate

TUB material: code=rha4ta  
ny0\* (CMY0)



5/farbmatrik/QE17/QE17L0FA.TXT /PS; 3D-linearization  
QE17/QE17LE30FA.DAT in file (F), page 30/33

| n    | HIC <sup>+</sup> Fold | rgb <sup>+</sup> Fold |       | ict <sup>+</sup> Fold | hs <sup>+</sup> Fold |       | rgb <sup>+</sup> Fold |       | LabCh <sup>+</sup> Fold | cmv <sup>+</sup> sep <sup>+</sup> Fold |     | hs <sup>+</sup> Mid | rgb <sup>+</sup> Mid |     | LabCh <sup>+</sup> Mid |     |     |
|------|-----------------------|-----------------------|-------|-----------------------|----------------------|-------|-----------------------|-------|-------------------------|----------------------------------------|-----|---------------------|----------------------|-----|------------------------|-----|-----|
|      |                       | 1.0                   | 0.0   |                       | 1.0                  | 0.0   | 1.0                   | 0.0   |                         | 1.0                                    | 0.0 |                     | 1.0                  | 0.0 |                        | 1.0 | 0.0 |
| 8101 | NW_1000d              | 0.875                 | 0.875 | 1.0                   | 0.0                  | 1.0   | 0.937                 | 270   | 0.875                   | 0.875                                  | 1.0 | 0.0                 | 0.0                  | 1.0 | 0.0                    | 0.0 | 0.0 |
| 8110 | BOOR_100_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8111 | BOOR_100_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8112 | BOOR_100_0374d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8113 | BOOR_100_0504d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8114 | BOOR_100_0624d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8115 | BOOR_100_0754d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8116 | BOOR_100_0874d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8117 | BOOR_100_1004d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8118 | BOOR_100_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8119 | BOOR_100_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8120 | NW_0874d              | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8121 | BOOR_087_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8122 | BOOR_087_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8123 | BOOR_087_0374d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8124 | BOOR_087_0504d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8125 | BOOR_087_0624d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8126 | BOOR_087_0754d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8127 | BOOR_087_0874d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8128 | BOOR_087_1004d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8129 | Y00C_100_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8130 | Y00C_087_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8131 | NW_0754d              | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8132 | BOOR_075_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8133 | BOOR_075_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8134 | BOOR_075_0374d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8135 | BOOR_075_0504d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8136 | BOOR_075_0624d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8137 | BOOR_075_0754d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8138 | Y00C_075_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8139 | Y00C_075_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8140 | NW_0625_0124d         | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8141 | BOOR_062_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8142 | BOOR_062_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8143 | BOOR_062_0374d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8144 | BOOR_062_0504d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8145 | BOOR_062_0624d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8146 | BOOR_062_0754d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8147 | Y00C_100_0504d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8148 | Y00C_087_0374d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8149 | Y00C_062_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8150 | NW_0504d              | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8151 | BOOR_050_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8152 | BOOR_050_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8153 | BOOR_050_0374d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8154 | BOOR_050_0504d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8155 | Y00C_100_0624d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8156 | Y00C_087_0504d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8157 | Y00C_075_0374d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8158 | Y00C_062_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8159 | Y00C_050_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8160 | NW_0374d              | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8161 | BOOR_037_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8162 | BOOR_037_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8163 | BOOR_037_0374d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8164 | Y00C_100_0754d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8165 | Y00C_087_0624d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8166 | Y00C_075_0504d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8167 | Y00C_062_0374d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8168 | Y00C_050_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8169 | Y00C_037_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8170 | NW_0254d              | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8171 | BOOR_025_0124d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8172 | BOOR_025_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8173 | Y00C_100_0874d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8174 | Y00C_087_0754d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8175 | Y00C_075_0624d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8176 | Y00C_062_0504d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8177 | Y00C_050_0374d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8178 | Y00C_037_0254d        | 0.875                 | 0.875 | 1.0                   | 0.125                | 0.937 | 270                   | 0.875 | 0.875                   | 1.0                                    | 0.0 | 6.2                 | 306.2                | 0.0 | 0.0                    | 0.0 | 0.0 |
| 8179 | Y00C_025_0124d        | 0.875                 | 0.    |                       |                      |       |                       |       |                         |                                        |     |                     |                      |     |                        |     |     |

Mean color difference of this page: delta

input: *rgb/cmyk*  $\rightarrow$  *rgb*<sub>dd</sub>  
output: 3D-linearization to *cmy0\**<sub>dd</sub>

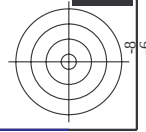
QE170-7N, Page 30/33-F

TUB-test chart QE17; hue code: H<sub>d</sub><sup>\*</sup>=R50Y<sub>d</sub>  
colors and differences,  $\Delta E^*$

1-1032931-F0



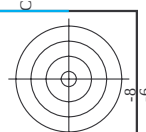
see similar files: <http://130.149.60.45/~farbmatrik/QE17/QE17.HTM>  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>





TUB registration: 20130201-QE17/QE17L0FA.TXT /.PS  
- application for measurement of offset print output, separate

TUB material: code=rha4ta  
ny0\* (CMY0)



http://130.149.60.45/~farbmatrik/QE17/QE17L0FA.TXT /PS; 3D-linearization  
F: 3D-linearization QE17/QE17L30FA.DAT in file (F), page 31/33

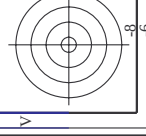
| n   | HIC <sup>+</sup> Fold | rgb <sup>+</sup> Fold | ict <sup>+</sup> Fold | hs <sup>+</sup> Fold | rgb <sup>+</sup> Fold | LabCh <sup>+</sup> Fold | cmv <sup>+</sup> sep <sup>+</sup> Fold | hs <sup>+</sup> Mid | rgb <sup>+</sup> Mid | LabCh <sup>+</sup> Mid | Mean color difference of this page: |       |
|-----|-----------------------|-----------------------|-----------------------|----------------------|-----------------------|-------------------------|----------------------------------------|---------------------|----------------------|------------------------|-------------------------------------|-------|
|     |                       |                       |                       |                      |                       |                         |                                        |                     |                      |                        | 0.0                                 | 0.0   |
| 891 | NW_1000d              | 1.0                   | 1.0                   | 1.0                  | 1.0                   | 95.6                    | 0.0                                    | 360                 | 1.0                  | 1.0                    | 95.6                                | 0.0   |
| 892 | B50R_100              | 1.0                   | 0.875                 | 1.0                  | 0.875                 | 1.0                     | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 893 | B50R_100_0124d        | 1.0                   | 0.125                 | 0.937                | 1.0                   | 88.4                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 894 | B50R_100_0254d        | 1.0                   | 0.875                 | 0.330                | 1.0                   | 83.2                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 895 | B50R_100_0374d        | 1.0                   | 0.75                  | 1.0                  | 0.75                  | 1.0                     | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 896 | B50R_100_0504d        | 1.0                   | 0.625                 | 1.0                  | 0.625                 | 1.0                     | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 897 | B50R_100_0624d        | 1.0                   | 0.5                   | 1.0                  | 0.5                   | 70.8                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 898 | B50R_100_0754d        | 1.0                   | 0.375                 | 1.0                  | 0.375                 | 1.0                     | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 899 | B50R_100_0874d        | 1.0                   | 0.25                  | 1.0                  | 0.25                  | 64.6                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 900 | B50R_100_1004d        | 1.0                   | 0.125                 | 1.0                  | 0.125                 | 58.4                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 901 | G00R_100              | 1.0                   | 1.0                   | 1.0                  | 1.0                   | 52.3                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 902 | NW_0874d              | 0.875                 | 1.0                   | 0.125                | 0.875                 | 88.9                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 903 | B50R_087_0124d        | 0.875                 | 0.875                 | 0.360                | 0.875                 | 80.5                    | 0.0                                    | 360                 | 1.0                  | 1.0                    | 50.0                                | -65.0 |
| 904 | B50R_087_0254d        | 0.875                 | 0.875                 | 0.125                | 0.875                 | 86.7                    | 0.0                                    | 360                 | 1.0                  | 1.0                    | 50.0                                | -65.0 |
| 905 | B50R_087_0374d        | 0.875                 | 0.875                 | 0.25                 | 0.875                 | 80.5                    | 0.0                                    | 360                 | 1.0                  | 1.0                    | 50.0                                | -65.0 |
| 906 | B50R_087_0504d        | 0.875                 | 0.875                 | 0.375                | 0.875                 | 68.1                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 907 | B50R_087_0624d        | 0.875                 | 0.875                 | 0.625                | 0.875                 | 61.9                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 908 | B50R_087_0754d        | 0.875                 | 0.875                 | 0.625                | 0.875                 | 55.7                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 909 | B50R_087_1004d        | 0.875                 | 0.875                 | 0.625                | 0.875                 | 49.5                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 910 | G00R_100_0254d        | 0.75                  | 1.0                   | 0.25                 | 0.875                 | 84.2                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 911 | NW_0754d              | 0.75                  | 0.875                 | 0.125                | 0.875                 | 81.0                    | 0.0                                    | 149                 | 0.0                  | 1.0                    | 50.0                                | -65.0 |
| 912 | B50R_075_0124d        | 0.75                  | 0.875                 | 0.360                | 0.75                  | 77.8                    | 0.0                                    | 149                 | 0.0                  | 1.0                    | 50.0                                | -65.0 |
| 913 | B50R_075_0254d        | 0.75                  | 0.875                 | 0.125                | 0.687                 | 71.6                    | 0.0                                    | 360                 | 1.0                  | 1.0                    | 95.6                                | 0.0   |
| 914 | B50R_075_0374d        | 0.75                  | 0.875                 | 0.25                 | 0.687                 | 65.4                    | 0.0                                    | 360                 | 1.0                  | 1.0                    | 95.6                                | 0.0   |
| 915 | B50R_075_0504d        | 0.75                  | 0.875                 | 0.375                | 0.687                 | 59.2                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 916 | B50R_075_0624d        | 0.75                  | 0.875                 | 0.625                | 0.687                 | 53.0                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 917 | B50R_075_0754d        | 0.75                  | 0.875                 | 0.625                | 0.687                 | 46.8                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 918 | G00R_100_0374d        | 0.625                 | 1.0                   | 0.375                | 0.875                 | 40.6                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 919 | G00R_100_0504d        | 0.625                 | 1.0                   | 0.375                | 0.875                 | 34.4                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 920 | G00R_100_0624d        | 0.625                 | 1.0                   | 0.375                | 0.875                 | 28.2                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |
| 921 | G00R_100_0754d        | 0.625                 | 1.0                   | 0.375                | 0.875                 | 22.0                    | 0.0                                    | 330                 | 1.0                  | 1.0                    | 46.1                                | 79.3  |

**Mean color difference of this page:**

TUB-test chart QE17; hue code: H<sub>d</sub><sup>\*</sup>=R50Y<sub>d</sub>

input: *rgb/cmyk*  $\rightarrow$  *rgb<sub>dd</sub>*  
output: 3D-linearization to *cmy0\**<sub>dd</sub>

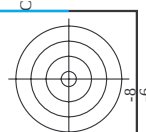
-see similar files: <http://130.149.60.45/~farbmatrik/QE17/QE17.HTM>  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>





TUB registration: 20130201-QE17/QE17L0FA.TXT /.PS  
- application for measurement of offset print output, separate

TUB material: code=rha4ta  
ny0\* (CMY0)



V L O Y M  
http://130.149.60.45/~farbmatrik/QE17/QE17L0FA.TXT /PS; 3D-linearization  
F: 3D-linearization QE17/QE17LE30FA.DAT in file (F), page 32/33

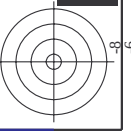
| $n$  | HC <sup>o</sup> -Fid | rgb <sub>o</sub> -Fid | ict <sub>o</sub> -Fid | hs <sub>o</sub> -Fid | rgb <sup>o</sup> -Fid | LabCh <sup>o</sup> -Fid | cmv <sup>o</sup> <sub>sep</sub> -Fid | hs <sub>ax</sub> -Fid | rgb <sup>ax</sup> -Fid | LabCh <sup>ax</sup> -Fid | $n$  | HC <sup>o</sup> -Fid | rgb <sub>o</sub> -Fid | ict <sub>o</sub> -Fid | hs <sub>o</sub> -Fid | rgb <sup>o</sup> -Fid | LabCh <sup>o</sup> -Fid | cmv <sup>o</sup> <sub>sep</sub> -Fid | hs <sub>ax</sub> -Fid | rgb <sup>ax</sup> -Fid | LabCh <sup>ax</sup> -Fid |     |     |     |
|------|----------------------|-----------------------|-----------------------|----------------------|-----------------------|-------------------------|--------------------------------------|-----------------------|------------------------|--------------------------|------|----------------------|-----------------------|-----------------------|----------------------|-----------------------|-------------------------|--------------------------------------|-----------------------|------------------------|--------------------------|-----|-----|-----|
| 972  | NW_000ad             | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.0                                  | 360                   | 1.0                    | 1.0                      | 956  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 1.0                                  | 360                   | 1.0                    | 1.0                      | 956 | 0.0 |     |
| 973  | NW_012ad             | 0.125                 | 0.125                 | 0.125                | 0.125                 | 0.0                     | 0.0                                  | 360                   | 0.885                  | 0.774                    | 9736 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.885                                | 0.774                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 974  | NW_025ad             | 0.25                  | 0.25                  | 0.25                 | 0.25                  | 0.0                     | 0.0                                  | 360                   | 0.743                  | 0.587                    | 974  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.743                                | 0.587                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 975  | NW_037ad             | 0.375                 | 0.375                 | 0.375                | 0.375                 | 0.0                     | 0.0                                  | 360                   | 0.653                  | 0.473                    | 975  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.653                                | 0.473                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 976  | NW_050ad             | 0.5                   | 0.5                   | 0.5                  | 0.5                   | 0.0                     | 0.0                                  | 360                   | 0.54                   | 0.382                    | 976  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.54                                 | 0.382                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 977  | NW_062ad             | 0.625                 | 0.625                 | 0.625                | 0.625                 | 0.0                     | 0.0                                  | 360                   | 0.417                  | 0.26                     | 977  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.417                                | 0.26                  | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 978  | NW_075ad             | 0.75                  | 0.75                  | 0.75                 | 0.75                  | 0.0                     | 0.0                                  | 360                   | 0.299                  | 0.181                    | 978  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.299                                | 0.181                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 979  | NW_087ad             | 0.875                 | 0.875                 | 0.875                | 0.875                 | 0.0                     | 0.0                                  | 360                   | 0.162                  | 0.101                    | 979  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.162                                | 0.101                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 980  | NW_100ad             | 1.0                   | 1.0                   | 1.0                  | 1.0                   | 0.0                     | 0.0                                  | 360                   | 0.0                    | 0.0                      | 980  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.0                                  | 360                   | 1.0                    | 1.0                      | 956 | 0.0 |     |
| 981  | NW_000ad             | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.0                                  | 360                   | 1.0                    | 1.0                      | 956  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 1.0                                  | 360                   | 1.0                    | 1.0                      | 956 | 0.0 |     |
| 982  | NW_012ad             | 0.125                 | 0.125                 | 0.125                | 0.125                 | 0.0                     | 0.0                                  | 360                   | 0.885                  | 0.774                    | 982  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.885                                | 0.774                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 983  | NW_025ad             | 0.25                  | 0.25                  | 0.25                 | 0.25                  | 0.0                     | 0.0                                  | 360                   | 0.743                  | 0.587                    | 983  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.743                                | 0.587                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 984  | NW_037ad             | 0.375                 | 0.375                 | 0.375                | 0.375                 | 0.0                     | 0.0                                  | 360                   | 0.653                  | 0.473                    | 984  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.653                                | 0.473                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 985  | NW_050ad             | 0.5                   | 0.5                   | 0.5                  | 0.5                   | 0.0                     | 0.0                                  | 360                   | 0.54                   | 0.382                    | 985  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.54                                 | 0.382                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 986  | NW_062ad             | 0.625                 | 0.625                 | 0.625                | 0.625                 | 0.0                     | 0.0                                  | 360                   | 0.417                  | 0.26                     | 986  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.417                                | 0.26                  | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 987  | NW_075ad             | 0.75                  | 0.75                  | 0.75                 | 0.75                  | 0.0                     | 0.0                                  | 360                   | 0.299                  | 0.181                    | 987  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.299                                | 0.181                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 988  | NW_087ad             | 0.875                 | 0.875                 | 0.875                | 0.875                 | 0.0                     | 0.0                                  | 360                   | 0.162                  | 0.101                    | 988  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.162                                | 0.101                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 989  | NW_0989              | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.0                                  | 360                   | 1.0                    | 1.0                      | 956  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 1.0                                  | 360                   | 1.0                    | 1.0                      | 956 | 0.0 |     |
| 990  | NW_000ad             | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.0                                  | 360                   | 1.0                    | 1.0                      | 956  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 1.0                                  | 360                   | 1.0                    | 1.0                      | 956 | 0.0 |     |
| 991  | NW_012ad             | 0.125                 | 0.125                 | 0.125                | 0.125                 | 0.0                     | 0.0                                  | 360                   | 0.885                  | 0.774                    | 991  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.885                                | 0.774                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 992  | NW_025ad             | 0.25                  | 0.25                  | 0.25                 | 0.25                  | 0.0                     | 0.0                                  | 360                   | 0.743                  | 0.587                    | 992  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.743                                | 0.587                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 993  | NW_037ad             | 0.375                 | 0.375                 | 0.375                | 0.375                 | 0.0                     | 0.0                                  | 360                   | 0.653                  | 0.473                    | 993  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.653                                | 0.473                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 994  | NW_050ad             | 0.5                   | 0.5                   | 0.5                  | 0.5                   | 0.0                     | 0.0                                  | 360                   | 0.54                   | 0.382                    | 994  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.54                                 | 0.382                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 995  | NW_062ad             | 0.625                 | 0.625                 | 0.625                | 0.625                 | 0.0                     | 0.0                                  | 360                   | 0.417                  | 0.26                     | 995  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.417                                | 0.26                  | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 996  | NW_075ad             | 0.75                  | 0.75                  | 0.75                 | 0.75                  | 0.0                     | 0.0                                  | 360                   | 0.299                  | 0.181                    | 996  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.299                                | 0.181                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 997  | NW_087ad             | 0.875                 | 0.875                 | 0.875                | 0.875                 | 0.0                     | 0.0                                  | 360                   | 0.162                  | 0.101                    | 997  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.162                                | 0.101                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 998  | NW_100ad             | 1.0                   | 1.0                   | 1.0                  | 1.0                   | 0.0                     | 0.0                                  | 360                   | 0.0                    | 0.0                      | 998  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.0                                  | 360                   | 1.0                    | 1.0                      | 956 | 0.0 |     |
| 999  | NW_000ad             | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.0                                  | 360                   | 1.0                    | 1.0                      | 956  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 1.0                                  | 360                   | 1.0                    | 1.0                      | 956 | 0.0 |     |
| 1000 | NW_012ad             | 0.125                 | 0.125                 | 0.125                | 0.125                 | 0.0                     | 0.0                                  | 360                   | 0.885                  | 0.774                    | 1000 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.885                                | 0.774                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1001 | NW_025ad             | 0.25                  | 0.25                  | 0.25                 | 0.25                  | 0.0                     | 0.0                                  | 360                   | 0.743                  | 0.587                    | 1001 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.743                                | 0.587                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1002 | NW_037ad             | 0.375                 | 0.375                 | 0.375                | 0.375                 | 0.0                     | 0.0                                  | 360                   | 0.653                  | 0.473                    | 1002 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.653                                | 0.473                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1003 | NW_050ad             | 0.5                   | 0.5                   | 0.5                  | 0.5                   | 0.0                     | 0.0                                  | 360                   | 0.54                   | 0.382                    | 1003 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.54                                 | 0.382                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1004 | NW_062ad             | 0.625                 | 0.625                 | 0.625                | 0.625                 | 0.0                     | 0.0                                  | 360                   | 0.417                  | 0.26                     | 1004 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.417                                | 0.26                  | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1005 | NW_075ad             | 0.75                  | 0.75                  | 0.75                 | 0.75                  | 0.0                     | 0.0                                  | 360                   | 0.299                  | 0.181                    | 1005 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.299                                | 0.181                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1006 | NW_087ad             | 0.875                 | 0.875                 | 0.875                | 0.875                 | 0.0                     | 0.0                                  | 360                   | 0.162                  | 0.101                    | 1006 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.162                                | 0.101                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1007 | NW_000ad             | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.0                                  | 360                   | 1.0                    | 1.0                      | 956  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 1.0                                  | 360                   | 1.0                    | 1.0                      | 956 | 0.0 |     |
| 1008 | NW_012ad             | 0.125                 | 0.125                 | 0.125                | 0.125                 | 0.0                     | 0.0                                  | 360                   | 0.885                  | 0.774                    | 1008 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.885                                | 0.774                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1009 | NW_025ad             | 0.25                  | 0.25                  | 0.25                 | 0.25                  | 0.0                     | 0.0                                  | 360                   | 0.743                  | 0.587                    | 1009 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.743                                | 0.587                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1010 | NW_037ad             | 0.375                 | 0.375                 | 0.375                | 0.375                 | 0.0                     | 0.0                                  | 360                   | 0.653                  | 0.473                    | 1010 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.653                                | 0.473                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1011 | NW_050ad             | 0.5                   | 0.5                   | 0.5                  | 0.5                   | 0.0                     | 0.0                                  | 360                   | 0.54                   | 0.382                    | 1011 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.54                                 | 0.382                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1012 | NW_062ad             | 0.625                 | 0.625                 | 0.625                | 0.625                 | 0.0                     | 0.0                                  | 360                   | 0.417                  | 0.26                     | 1012 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.417                                | 0.26                  | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1013 | NW_075ad             | 0.75                  | 0.75                  | 0.75                 | 0.75                  | 0.0                     | 0.0                                  | 360                   | 0.299                  | 0.181                    | 1013 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.299                                | 0.181                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1014 | NW_087ad             | 0.875                 | 0.875                 | 0.875                | 0.875                 | 0.0                     | 0.0                                  | 360                   | 0.162                  | 0.101                    | 1014 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.162                                | 0.101                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1015 | NW_093ad             | 0.933                 | 0.933                 | 0.933                | 0.933                 | 0.0                     | 0.0                                  | 360                   | 0.09                   | 0.054                    | 1015 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.09                                 | 0.054                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1016 | NW_053ad             | 0.533                 | 0.533                 | 0.533                | 0.533                 | 0.0                     | 0.0                                  | 360                   | 0.509                  | 0.354                    | 1016 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.509                                | 0.354                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1017 | NW_060ad             | 0.6                   | 0.6                   | 0.6                  | 0.6                   | 0.0                     | 0.0                                  | 360                   | 0.442                  | 0.285                    | 1017 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.442                                | 0.285                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1018 | NW_066ad             | 0.666                 | 0.666                 | 0.666                | 0.666                 | 0.0                     | 0.0                                  | 360                   | 0.377                  | 0.228                    | 1018 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.377                                | 0.228                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1019 | NW_073ad             | 0.734                 | 0.734                 | 0.734                | 0.734                 | 0.0                     | 0.0                                  | 360                   | 0.314                  | 0.191                    | 1019 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.314                                | 0.191                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1020 | NW_080ad             | 0.8                   | 0.8                   | 0.8                  | 0.8                   | 0.0                     | 0.0                                  | 360                   | 0.252                  | 0.153                    | 1020 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.252                                | 0.153                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1021 | NW_086ad             | 0.866                 | 0.866                 | 0.866                | 0.866                 | 0.0                     | 0.0                                  | 360                   | 0.173                  | 0.108                    | 1021 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.173                                | 0.108                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1022 | NW_093ad             | 0.933                 | 0.933                 | 0.933                | 0.933                 | 0.0                     | 0.0                                  | 360                   | 0.09                   | 0.054                    | 1022 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.09                                 | 0.054                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1023 | NW_100ad             | 1.0                   | 1.0                   | 1.0                  | 1.0                   | 0.0                     | 0.0                                  | 360                   | 0.0                    | 0.0                      | 1023 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.0                                  | 360                   | 1.0                    | 1.0                      | 956 | 0.0 |     |
| 1024 | NW_000ad             | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.0                                  | 360                   | 1.0                    | 1.0                      | 956  | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 1.0                                  | 360                   | 1.0                    | 1.0                      | 956 | 0.0 |     |
| 1025 | NW_006ad             | 0.066                 | 0.066                 | 0.066                | 0.066                 | 0.0                     | 0.0                                  | 360                   | 0.935                  | 0.855                    | 1025 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.935                                | 0.855                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1026 | NW_013ad             | 0.133                 | 0.133                 | 0.133                | 0.133                 | 0.0                     | 0.0                                  | 360                   | 0.879                  | 0.763                    | 1026 | 0.0                  | 0.0                   | 0.0                   | 0.0                  | 0.0                   | 0.0                     | 0.879                                | 0.763                 | 360                    | 1.0                      | 1.0 | 956 | 0.0 |
| 1027 | NW_020ad             | 0.2                   | 0.2                   | 0.2                  | 0.2                   | 0.0                     | 0.0                                  | 360                   | 0.79                   |                          |      |                      |                       |                       |                      |                       |                         |                                      |                       |                        |                          |     |     |     |

-1033131-E0

QE170-7N, Page 32/33-F

TUB-test chart QE17; hue code:  $H_d^* = R50Y_d$   
colors and differences.  $\Delta E^*$

input: *rgb/cmyk*  $\rightarrow$  *rgb*<sub>dd</sub>  
output: 3D-linearization to *cmv0\**<sub>dd</sub>



-see similar files: <http://130.149.60.45/~farbmatrik/QE17/QE17.HTM>  
 technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmatrik>

TUB registration: 20130201-QE17/QE17L0FA.TXT /.PS TUB material: code=rha4ta  
application for measurement of offset print output, separation cmy0\* (CMY0)

see similar files: <http://130.149.60.45/~farbmetrik/QE17/QE17.HTM>  
technical information: <http://www.ps.bam.de> or <http://130.149.60.45/~farbmetrik>

TUB-test chart QE17; hue code: H\*d=R50Yd  
colors and differences,  $\Delta E^*$

input: *rgb/cmyk* -> *rgb*<sub>dd</sub>  
output: 3D-linearization to *cmy0\**<sub>dd</sub>

| n    | HVC*Fid        | rgb_Fid           | lcr_Fid           | hsa_Fid           | rgb*Fid           | LabCH*Fid      | cmy0*_sep_Fid     | cmyn*_sep_Fid     | hsa_dld     | rgb*_dd     | LabCH*_dd        | delta           |
|------|----------------|-------------------|-------------------|-------------------|-------------------|----------------|-------------------|-------------------|-------------|-------------|------------------|-----------------|
| 1053 | NW_086dd       | 0.866 0.866 0.866 | 0.866 0.866 0.866 | 0.866 0.866 0.866 | 0.866 0.866 0.866 | 86.0 0.0 0.0   | 0.009 0.009 0.009 | 0.173 0.108 0.054 | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1054 | NW_093dd       | 0.933 0.933 0.933 | 0.933 0.933 0.933 | 0.933 0.933 0.933 | 0.933 0.933 0.933 | 90.8 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1055 | NW_100dd       | 1.0 1.0 1.0       | 1.0 1.0 1.0       | 1.0 1.0 1.0       | 1.0 1.0 1.0       | 24.3 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1056 | NW_006dd       | 0.066 0.066 0.066 | 0.066 0.066 0.066 | 0.066 0.066 0.066 | 0.066 0.066 0.066 | 29.0 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1057 | NW_013dd       | 0.133 0.133 0.133 | 0.133 0.133 0.133 | 0.133 0.133 0.133 | 0.133 0.133 0.133 | 33.8 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1058 | NW_020dd       | 0.2 0.2 0.2       | 0.2 0.2 0.2       | 0.2 0.2 0.2       | 0.2 0.2 0.2       | 38.6 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1059 | NW_026dd       | 0.266 0.266 0.266 | 0.266 0.266 0.266 | 0.266 0.266 0.266 | 0.266 0.266 0.266 | 43.3 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1060 | NW_033dd       | 0.333 0.333 0.333 | 0.333 0.333 0.333 | 0.333 0.333 0.333 | 0.333 0.333 0.333 | 48.1 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1061 | NW_040dd       | 0.4 0.4 0.4       | 0.4 0.4 0.4       | 0.4 0.4 0.4       | 0.4 0.4 0.4       | 52.8 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1062 | NW_046dd       | 0.466 0.466 0.466 | 0.466 0.466 0.466 | 0.466 0.466 0.466 | 0.466 0.466 0.466 | 57.5 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1063 | NW_053dd       | 0.533 0.533 0.533 | 0.533 0.533 0.533 | 0.533 0.533 0.533 | 0.533 0.533 0.533 | 62.3 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1064 | NW_059dd       | 0.59 0.59 0.59    | 0.59 0.59 0.59    | 0.59 0.59 0.59    | 0.59 0.59 0.59    | 67.1 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1065 | NW_066dd       | 0.666 0.666 0.666 | 0.666 0.666 0.666 | 0.666 0.666 0.666 | 0.666 0.666 0.666 | 71.8 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1066 | NW_073dd       | 0.734 0.734 0.734 | 0.734 0.734 0.734 | 0.734 0.734 0.734 | 0.734 0.734 0.734 | 76.6 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1067 | NW_080dd       | 0.8 0.8 0.8       | 0.8 0.8 0.8       | 0.8 0.8 0.8       | 0.8 0.8 0.8       | 81.3 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1068 | NW_086dd       | 0.866 0.866 0.866 | 0.866 0.866 0.866 | 0.866 0.866 0.866 | 0.866 0.866 0.866 | 86.0 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1069 | NW_093dd       | 0.933 0.933 0.933 | 0.933 0.933 0.933 | 0.933 0.933 0.933 | 0.933 0.933 0.933 | 90.8 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1070 | NW_100dd       | 1.0 1.0 1.0       | 1.0 1.0 1.0       | 1.0 1.0 1.0       | 1.0 1.0 1.0       | 24.3 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1071 | NW_006dd       | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 29.0 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1072 | NW_013dd       | 0.1 0.1 0.1       | 0.1 0.1 0.1       | 0.1 0.1 0.1       | 0.1 0.1 0.1       | 33.8 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1073 | NW_020dd       | 0.2 0.2 0.2       | 0.2 0.2 0.2       | 0.2 0.2 0.2       | 0.2 0.2 0.2       | 38.6 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 1.0 1.0 | 95.6 95.6 95.6   | 0.0 0.0 0.0     |
| 1074 | ROY_100_100dd  | 1.0 0.0 0.0       | 1.0 0.0 0.0       | 1.0 0.0 0.0       | 1.0 0.0 0.0       | 44.8 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 0.0 0.0 | 45.4 70.9 44.8   | 32.3 83.9 32.3  |
| 1075 | G50B_100_100dd | 0.0 1.0 0.0       | 0.0 1.0 0.0       | 0.0 1.0 0.0       | 0.0 1.0 0.0       | 56.8 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 0.0 1.0 0.0 | 56.8 -25.5 -41.5 | 48.7 238.4 48.7 |
| 1076 | Y06B_100_100dd | 0.0 0.0 1.0       | 0.0 0.0 1.0       | 0.0 0.0 1.0       | 0.0 0.0 1.0       | 96.1 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 0.0 0.0 1.0 | 96.1 95.4 96.1   | 96.1 96.0 96.1  |
| 1077 | B06B_100_100dd | 0.0 1.0 0.0       | 0.0 1.0 0.0       | 0.0 1.0 0.0       | 0.0 1.0 0.0       | 50.0 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 0.0 1.0 0.0 | 50.0 29.5 40.4   | 50.0 306.2 50.0 |
| 1078 | B06B_100_100dd | 0.0 1.0 0.0       | 0.0 1.0 0.0       | 0.0 1.0 0.0       | 0.0 1.0 0.0       | 50.0 0.0 0.0   | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 0.0 1.0 0.0 | 50.0 29.5 40.4   | 50.0 306.2 50.0 |
| 1079 | B50B_100_100dd | 1.0 0.0 0.0       | 1.0 0.0 0.0       | 1.0 0.0 0.0       | 1.0 0.0 0.0       | 79.3 -0.2 79.3 | 0.0 0.0 0.0       | 0.0 0.0 0.0       | 360 360 360 | 1.0 0.0 0.0 | 46.1 79.3 -0.2   | 79.3 359.8 79.3 |